

CONNECTIONS

A PERIODICAL MAGAZINE AT THE BRITISH UNIVERSITY IN DUBAI CONNECTING MINDS



FEATURING:
**UAE AND ARAB
UNIVERSITY
RANKINGS 2026**

104

TOP 10
IN THE
ARAB WORLD



TOP 4
IN THE UAE

THE BRITISH UNIVERSITY IN DUBAI

**THE IMPACT OF SOCIAL MEDIA
ON THE MENTAL HEALTH OF
YOUTH**

**BUID COMMUNITY
ACHIEVEMENTS AND NEW
APPOINTMENTS**

**YOUR EYES CAN BE
FOOLED.
THIS MACHINE CANNOT**

FOREWORD

Professor Abdullah Alshamsi

Vice-Chancellor at the British University in Dubai



A Vision of Unified Strength

Each issue of Connections captures a moment of aspiration and intellectual rigor at The British University in Dubai. As we unveil this sixth edition, we celebrate our collective journey as a university, a community, and a cornerstone of this nation.

This year marks a historic milestone: our ranking as No. 10 in the Arab University Rankings. This achievement is a tribute to the excellence of our students and faculty, reinforcing our position as a regional hub of knowledge.

The UAE's narrative is built on turning the impossible into the inevitable. Inspired by our founding fathers, we remain committed to the UAE's Centennial 2071 goals. In a world of rapid change and recent regional challenges, we are reminded that our true strength lies in our people. In the face of recent events, we stand together—unified, resolute, and bound by a shared purpose to protect our values and our future.

In this edition, you will encounter voices that embody this resilience. Our contributors explore the intersection of innovation and human connection, from digital learning to cultural identity, ensuring we advance with a foundation of unity.

Connections is a meeting place for minds. I invite you to engage with these ideas as we continue to shape the future together.

Prof Abdullah Alshamsi

Vice-Chancellor
The British University in Dubai

EDITOR IN CHIEF REMARKS

Welcome to the sixth edition of Connections. Since our first release in 2021, this magazine has grown from an ambitious idea into a vibrant platform that reflects the intellectual spirit of The British University in Dubai. This issue is especially meaningful as we mark an important milestone: our recognition as No. 10 in the Arab world.

With every publication, Connections evolves—broadening its themes and strengthening the voices behind them. What you will find here is more than a series of articles; it is a showcase of curiosity, creativity, and the emerging scholarship that defines our community.

In this edition, we highlight stories that merge innovation with real-world impact. Our contributors explore timely questions through an interdisciplinary lens, demonstrating how academic insight can influence broader conversations and help shape solutions for the future.

Looking forward, our aim is to continue expanding Connections as a bridge between rigorous research and creative expression. We want this platform to empower every student to share ideas that challenge conventions and inspire progress. The perspectives captured here today will help drive the innovations shaping the UAE's next fifty years.

We hope these stories engage and inspire you as much as they did our editorial team.

Prof Khalid Almarri

Editor-in-Chief

Dean of the Faculty of Business and Law, and Dean of
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The British University in Dubai



CONNECTIONS

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DIGITAL LEARNING: OPPORTUNITY OR DISTRACTION? NAVIGATING TECHNOLOGY IN HIGHER EDUCATION

by Ayda Asi Shirazi

In contemporary higher education, technology is no longer an optional supplement to learning; it is embedded in the very structure of academic life. Lecture slides are uploaded before class begins. Discussions continue on digital platforms long after the session ends. Research materials can be accessed within seconds through online databases. Thousands of articles are accessible through digital academic databases. From virtual classrooms to artificial intelligence tools, digital learning has transformed how students interact with information, theories, and finally, the “knowledge”. Yet this transformation raises an important question: is technology primarily an opportunity for enrichment, or has it become a source of distraction? The answer, perhaps unsurprisingly, lies somewhere in between.

Digital learning offers unprecedented access to information. Students today can explore scholarly articles, attend webinars hosted across the globe, and engage with multimedia resources that deepen understanding beyond traditional textbooks.



Online learning management systems provide flexibility, enabling students to revisit recorded lectures, track deadlines, and organise academic materials efficiently. For many, especially those balancing academic responsibilities with work or family commitments, digital platforms have improved accessibility and inclusivity in higher education.

Moreover, technology has reshaped pedagogical approaches. Interactive tools such as shared online documents allow students in higher education to collaboratively draft research proposals, co-construct presentations, peer-review essays, and even work remotely. Virtual simulations are particularly valuable in the education major programme, as they provide students with opportunities to observe, inspect, and practice the different pedagogical environments and practices in realistic settings. Students who may feel hesitant to share their opinions in large

lecture halls often find it easier to participate in online discussions. Digital spaces can smooth the path for students who find it difficult to engage with learning.

In this sense, technology has the potential to enhance and enrich students' experience throughout their higher education journey. At the same time, the digital environment poses undeniable challenges. The very devices that provide access to research articles and lecture materials also host social media platforms, instant messaging applications, and endless streams of entertainment.

The line between productive engagement and distraction can be remarkably thin. A student who opens a laptop to review lecture notes may quickly find attention drawn away by notifications or unrelated browsing.

Research in cognitive science consistently highlights the limits of multitasking. Divided attention reduces comprehension, weakens retention, and increases mental fatigue. When students attempt to simultaneously engage with academic material and digital distractions, the depth of learning often suffers.

Contd.

The issue, therefore, is not the presence of technology itself but how it is used.

Another important consideration is the shift in reading habits. Digital environments encourage rapid scanning, often called “Doomscrolling,” rather than sustained, critical reading. While this skill can help navigate vast amounts of information, higher education requires careful analysis, reflection, and synthesis. If students rely heavily on fragmented digital consumption, the capacity for deep academic engagement may gradually decrease. However, viewing digital learning as a completely harmful or distracting tool ignores its positive impacts. When technology is used with clear purpose and discipline, it can support academic development. The key lies in distinguishing between time dedicated to study and research and time reserved for entertainment.

When students intentionally set boundaries, they strengthen their focus and critical thinking. By separating academic engagement from social media and recreational browsing, technology becomes a supportive resource rather than a source of distraction. In this way, responsible and purposeful use determines whether technology enhances learning or undermines it.

Equally important is the development of self-regulation. Higher education is not only about acquiring knowledge; it is about cultivating habits of discipline. Students who approach digital tools with a clear purpose — setting boundaries, minimizing notifications during study sessions, and engaging actively rather than passively — can benefit from technology as a powerful ally in their academic journey. The debate over digital learning often frames the issue as a false dichotomy: opportunity versus distraction.

In reality, technology is neither purely beneficial nor harmful. It is a tool shaped by human intention.

A laptop in a lecture room can be a gateway to scholarly exploration or a portal to distraction. The difference lies in awareness, discipline, and purposeful use. As higher education continues to evolve, the question is no longer whether to use technology in the classroom. It already is. The more useful question is how students and institutions can cultivate a culture of mindful engagement. By recognising both the advantages and limitations of digital learning, the academic community can move beyond simplistic narratives and toward a balanced, informed approach.

The future of higher education will remain intertwined with digital innovation. The challenge — and the opportunity — is to ensure that innovation serves learning, rather than distracting it.





THE IMPACT OF SOCIAL MEDIA ON THE MENTAL HEALTH OF YOUTH

by Omer Ali Khalifa

In recent times, the use of social media has become very common; it has become a big part of most people's lives, from communication to education and entertainment, and it has completely changed the way we live. Even so, discussions about the downsides of social media and its impact on young people are especially limited. Suicide risks are heightened by the use of social media, as Nesi (2020) argues, “Content related to suicide and self-injury may also be readily available online, potentially increasing suicide risk among youth who are already vulnerable”. This raises a critical question: how does the use of social media influence mental health in the younger population? The main purpose of this research is to examine the negative and positive consequences of social media on the mental health of younger populations.

Convenience sampling was used by targeting students at the British University in Dubai and collecting responses, resulting in 68 total responses. This sampling method allows for accessibility and efficiency; however, it limits the ability to generalise the findings to a larger population.

The instrument used was a questionnaire consisting of closed-ended questions with limited response options, such as multiple-choice questions and checkboxes. The questions were designed to capture frequency of social media use, platform preferences, perceived influence, mental health impact, daily usage time, and views on self-esteem.

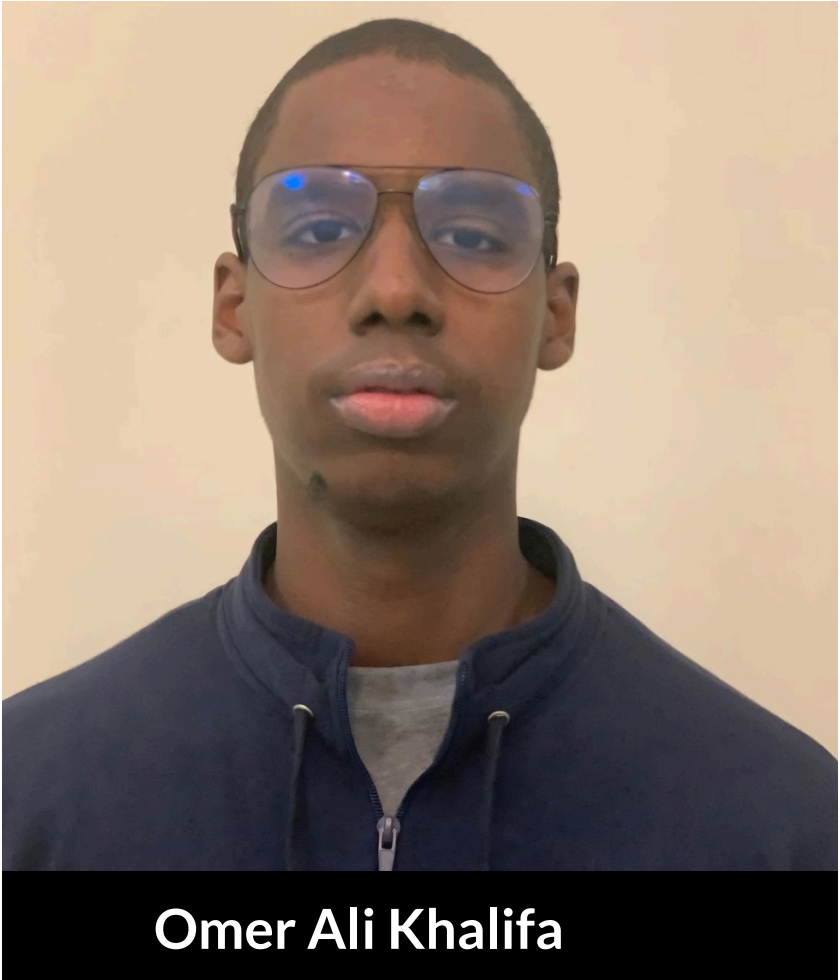
Most respondents reported frequent social media use, with 79.4% accessing it multiple times per day and 10.3% using it once daily. Three respondents used social media a few times per week, and a small number reported minimal or no use.



One respondent used it rarely, two never used it, and one chose not to disclose their usage. Overall, the findings indicate that social media is deeply integrated into youths’ daily routines, reflecting high engagement and reliance.

The findings identified Instagram, TikTok, Snapchat, and YouTube as the most popular social media platforms among youth. On average, respondents spend between 1–4 hours daily on social media. Many participants indicated that social media plays a fundamental role in communication, social relationships, and access to timely information. When asked whether social media is shaping the future values, communication styles, and worldviews of today’s youth (Vogels, 2022), over 70% agreed. Overall, the results show that social media has become deeply embedded in young people’s lives, serving as a primary space for forming relationships, consuming content, and sharing information, while significantly influencing identity and behaviour.

Through this research, I concluded that social media plays a significant role in the mental health of youth. While social media platforms offer valuable tools for communication and learning, the findings highlight great risks associated with excessive use, comparison, and exposure to harmful or misleading content.



Omer Ali Khalifa

INNOVATION AND SPECULATION: EVALUATING PERSPECTIVES ON THE AI BUBBLE

by Nadir Ymeri

As we bear witness to the rapid and far-reaching advancement of Artificial Intelligence (AI), it

becomes abundantly clear just how quickly an industry can flourish and permeate virtually every sector when the immense public expectations and hype are accompanied by substantial financial investment and resources. However, this rapid growth has raised legitimate concerns about its long-term sustainability and whether the industry can maintain its pace of development while meeting market demands, achieving

meaningful breakthroughs, and sustaining public confidence. This paper offers an introductory examination of perspectives from both experts and non-experts across various academic fields on the current state of the AI bubble. The idea that AI may be overhyped or in a bubble is not new in academic discourse. However, as the dynamics of the AI bubble become more evident over time, existing studies remain limited by the specific periods in which they were conducted, restricting their ability to capture its evolving nature.

To gather different perspectives on the AI bubble, the primary focus was directed towards those attending or teaching in higher education. The data from the respondents who completed the survey were categorised into the following:

Speculation Versus Innovation

Survey respondents predominantly

regarded AI as a transformative innovation, rather than a transient or speculative phenomenon. Although several participants recognised that the rapid advancement and increased visibility of AI are associated with some degree of hype and speculation, the majority maintained that AI's progress is primarily motivated by significant innovation and the potential for lasting impact, rather than by speculative enthusiasm.

Confidence in Continual Breakthroughs

Most respondents answered confidently when asked to rate the odds of AI continuing to accomplish breakthroughs. However, a quarter reported being less confident in its long-term capabilities.

Overvaluation of AI Companies

About 60% of respondents find the investment in AI companies excessive and overvalued, while only 14% fully supported the substantial financial investment directed toward the sector.

Business majors and academics, who are typically more focused on monetisation, were less likely than other scientific majors to view current AI investment as overvalued. Additionally, respondents with greater technical familiarity with AI were more likely to perceive the market as speculative, suggesting that deeper knowledge of the technology may foster scepticism about the hype surrounding it. Those who frequently used AI tools and understood their capabilities and limitations were less confident about continued major breakthroughs. Overall, many believe the resources invested in AI may be excessive, despite acknowledging its transformative potential. While AI's rapid rise is a defining technological achievement of the decade, it remains uncertain whether its greatest advances are behind us or still to come.



THE BRITISH UNIVERSITY IN DUBAI RANKS AMONG THE TOP 10 UNIVERSITIES IN THE ARAB WORLD, AND FOURTH IN THE UAE, IN THE 2026 RANKINGS

Adapted from a press release published on Zawya, December 11, 2025.

The British University in Dubai (BUID) has achieved a major milestone, ranking 10th in the Arab world and 4th in the UAE in the 2026 Times Higher Education (THE) Arab University Rankings. This remarkable achievement demonstrates BUID's continued ascent as one of the region's leading research-driven institutions and highlights its strong performance across core indicators of research excellence, teaching quality, international outlook, and innovation.

In addition to its overall ranking, BUID has achieved notable national positions across key disciplines in the THE 2026 Subject Rankings in the UAE:

- Education – 2nd
- Business– 3rd
- Computer Science – 6th
- Engineering – 7th
- Law– 10th



These results highlight BUID's academic strength across diverse fields and reinforce its commitment to offering high-impact programmes aligned with the UAE's knowledge and innovation priorities.

Prof. Abdullah Alshamsi, BUID's Vice Chancellor commented on this achievement, "This ranking represents a significant milestone for our university. It reflects the dedication of our faculty, the achievements of our students, and the trust of our partners, BUID remains committed to shaping a knowledge-based future for Dubai, the UAE, and the wider Arab world."

BUID's research-intensive British model, world-class faculty, and vibrant international community have enabled the University to excel consistently in citations, research productivity, and postgraduate education. With pioneering programmes in AI, engineering, business, education, and law, BUID continues to equip future leaders with the skills and expertise needed to advance national and regional development.

BUID is licensed by the UAE Ministry of Higher Education & Scientific Research. Our qualifications are also recognised internationally by UK ENIC. BUID has achieved global quality accreditation through the Quality Assurance Agency for Higher Education (QAA). Our internal quality assurance includes processes that ensure our programmes and students' achievements are of standards on a par with those of our UK university partners.

THE IMPACT OF SUBLIMINAL ADVERTISING ON CONSUMERS' BEHAVIOUR

by Sadan Mohammad Alshawabkah



Subliminal messaging refers to the practice of conveying messages that fall below the threshold of conscious awareness.

These messages can be presented so rapidly or subtly that they are not consciously perceived. The conclusion of this article aligns with expectations, underscoring the limited awareness of this powerful marketing technique and showing that its effects are not standard but rather depend on the degree of conscious awareness of its existence and other personal factors.

Do you truly believe that every decision you make is intentional? Well, think again. The subconscious mind holds the vast majority of human cognition. 95% of all cognition occurs in the subconscious mind, according to Zaltman (2003). While the brain can process approximately 11 million bits of information per second, the conscious mind is severely limited, handling only about 50 bits in the same timeframe. The subconscious is exponentially more powerful than our conscious awareness, a fact that is often overlooked. Having control over it is the primary goal of marketers.

Subliminal marketing combines both internal and external factors to persuade customers to purchase a particular product. It uses different techniques that target different parts of the brain, triggering subconscious needs or other feelings. The effects vary depending on whether the consumer becomes aware of it.

From a psychological perspective, consumers' behaviour is closely tied to how individuals process subliminal messages, or how they respond to stimuli, such as emotional words and scenes, often presented below their conscious awareness.

The impact of brand design and visual branding on consumers' behaviour is significant. Maintaining a consistent brand identity through brand design can create a sense of familiarity with the brand itself,

leaving an internal impression on the consumers, and leading to a kind of loyalty and perceived value. All of this is the result of the subconscious influence of thoroughly studied brand elements.

To emphasise the impact brand design has on consumers' behaviour, we can use celebrity Hailey Bieber's brand, "Rhode Beauty", which is a great example of the impact such marketing can have.

Rhode is a one-billion-dollar skincare brand mainly targeting women; the products themselves are not the reason for such big success, although they are fairly good. The secret here lies in how Hailey markets for them. The celebrity is already known for her lifestyle centred on wellness and skin health, which many women aspire to. And buying her products gives the illusion of living a similar lifestyle, which consumers associate with their desired self-image, while also fostering a sense of relatability with the celebrity herself.

The impact of subliminal marketing depends heavily on people's awareness of it, so, the effects are not standard. Sometimes the consumer might be mindful of the stimulus but oblivious to its short and long-term responses.

The findings of the research conducted at the British University in Dubai as part of the assessment component of one of the modules revealed that most research respondents consume content through social media and the internet, as expected. The study also indicated that large corporations and businesses already possess extensive consumer data, which has contributed to a significant shift in contemporary advertising practices. In addition, films, movies, and television received a considerable number of responses as influential media sources. The findings further suggest that when research respondents encounter a product or brand in a positive context, they are more likely to develop favourable perceptions of it, increasing their likelihood of consuming or purchasing the product.

by Sadan Mohammad Alshawabkah

Being influenced by marketing is not always negative, as marketing plays an important role in exposing consumers to available options and introducing them to new products or services that may improve their quality of life or make everyday tasks easier.

The research respondents were also presented with a hypothetical question asking whether they would stop watching a show if they discovered that subliminal marketing was being used to promote a product or idea within it. The responses were evenly split, with approximately half indicating they would stop watching and the other half stating they would continue. These findings suggest that the ethical implications of subliminal advertising are a significant concern for many individuals and that such techniques may be perceived as intrusive.

From this research, I aimed to assess people's familiarity with subliminal advertising and their potential exposure to it. The survey shows that social media is their primary source of media, increasing the likelihood of subconscious influence. Social media trends also create urgency and FOMO (Fear of missing out), encouraging consumers to engage with them.

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Social media trends also create urgency and FOMO, encouraging consumers to indulge in them.

Additionally, Movies play a bigger role than people might think, since advertising has been woven through them for much longer. However, both types of media influence product perception by subconsciously evoking feelings or by serving as a connector between the consumer and a certain person or identity.

Regarding respondents' ethical views on such matters, the results were consistent with expectations. Evident by a fair percentage being “not sure” about the questions that discussed the ethicality of the use of Subliminal advertising. Discomfort might be felt at the thought that messages might be being integrated into their brains without their conscious awareness, a concern that should be respected and considered.

Overall, there is clear confusion and limited knowledge about subliminal advertising. People hold differing views on subliminal marketing, reflecting low awareness of the method. Its effects are neither standardised nor consistent, as individuals process such messages differently depending on their beliefs and focus. However, recognising subliminal techniques does not eliminate their subconscious influence. The impact may be short- or long-term, potentially shaping perceptions and decision-making.



Sadan Mohammad Alshawabkah





Dr Manar Alkhatib

A VISION FOR ALL: A DATASET AND CNN FRAMEWORK FOR NAVIGATING EDUCATIONAL SPACES FOR THE VISUALLY IMPAIRED

by Dr Manar Alkhatib

“By combining real-world data collection, robust preprocessing, and state-of-the-art deep learning models, this work provides a practical step toward deployable assistive AI systems”

For millions of visually impaired individuals worldwide, navigating everyday environments remains a constant challenge. Tasks that sighted people take for granted recognising landmarks, avoiding obstacles, or locating facilities, often require significant effort, external assistance, or specialised tools. These challenges are amplified in complex indoor environments such as universities, where dynamic layouts, crowded spaces, and unfamiliar spatial arrangements make independent mobility difficult. Although artificial intelligence has transformed many aspects of modern life, accessible AI systems tailored to real-world academic environments remain limited. Recent advances in computer vision and speech technologies offer promising opportunities to bridge this gap by enabling intelligent systems that interpret visual scenes and convert them into meaningful audio guidance. However, such systems require realistic, large-scale datasets that reflect authentic environments rather than controlled laboratory conditions. Supporting

visually impaired individuals is therefore both a technological and societal imperative, calling for inclusive AI solutions that promote independence and equitable access to education and public spaces.

To address this need, the study introduces a large-scale image dataset designed specifically for assistive AI applications in university settings. Collected from Zayed University and the British University in Dubai, the dataset contains approximately 300,000 real-world images capturing diverse academic facilities such as classrooms, laboratories, corridors, cafeterias, doors, signage, and safety equipment. Unlike many datasets derived from curated or online sources, this collection emphasises authentic campus environments, incorporating variability in lighting, angles, crowd density, and environmental context. The dataset is intended to support intelligent assistive systems capable of recognising surroundings and delivering real-time spoken guidance, particularly in Arabic, enabling

visually impaired users to identify locations, detect obstacles, and navigate campuses more independently.

A key contribution of the work lies in the rigorous data preparation pipeline designed to ensure quality and robustness. The dataset underwent extensive preprocessing steps, including duplicate removal, filtering of blurry or visually redundant images, resizing and normalising images, and balancing classes. Data augmentation techniques such as rotation, flipping, brightness adjustment, and cropping were applied to enhance diversity and reduce overfitting. The dataset was also systematically organised into clearly labelled categories representing essential campus elements, enabling scalable training and evaluation of deep learning models.

To evaluate the dataset’s effectiveness, the authors implemented and compared multiple deep learning classification models. A baseline convolutional neural network (CNN) was developed with multiple convolutional and pooling layers for hierarchical feature extraction, followed by fully connected layers for multi-class classification. This model provided a strong reference point for performance evaluation. In addition, the study leveraged the ResNet50 architecture, a deep residual network known for its ability to train very deep models using skip connections that mitigate vanishing gradient problems. By using transfer learning with pre-trained weights and fine-tuning the model on the campus dataset, the authors efficiently captured both low-level visual features and high-level semantic patterns efficiently.

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The experimental results demonstrate the effectiveness of deep residual learning for environmental recognition tasks. While the baseline CNN achieved competitive performance, the ResNet50 model significantly outperformed it, achieving approximately 93% overall classification accuracy across multiple facility categories. Several classes, such as corridors, computer labs, doors, and lockers, achieved particularly high precision and recall, indicating strong discriminative learning. The analysis also revealed challenges with visually similar or underrepresented categories, such as signage and whiteboards, highlighting areas for future dataset expansion and model refinement.

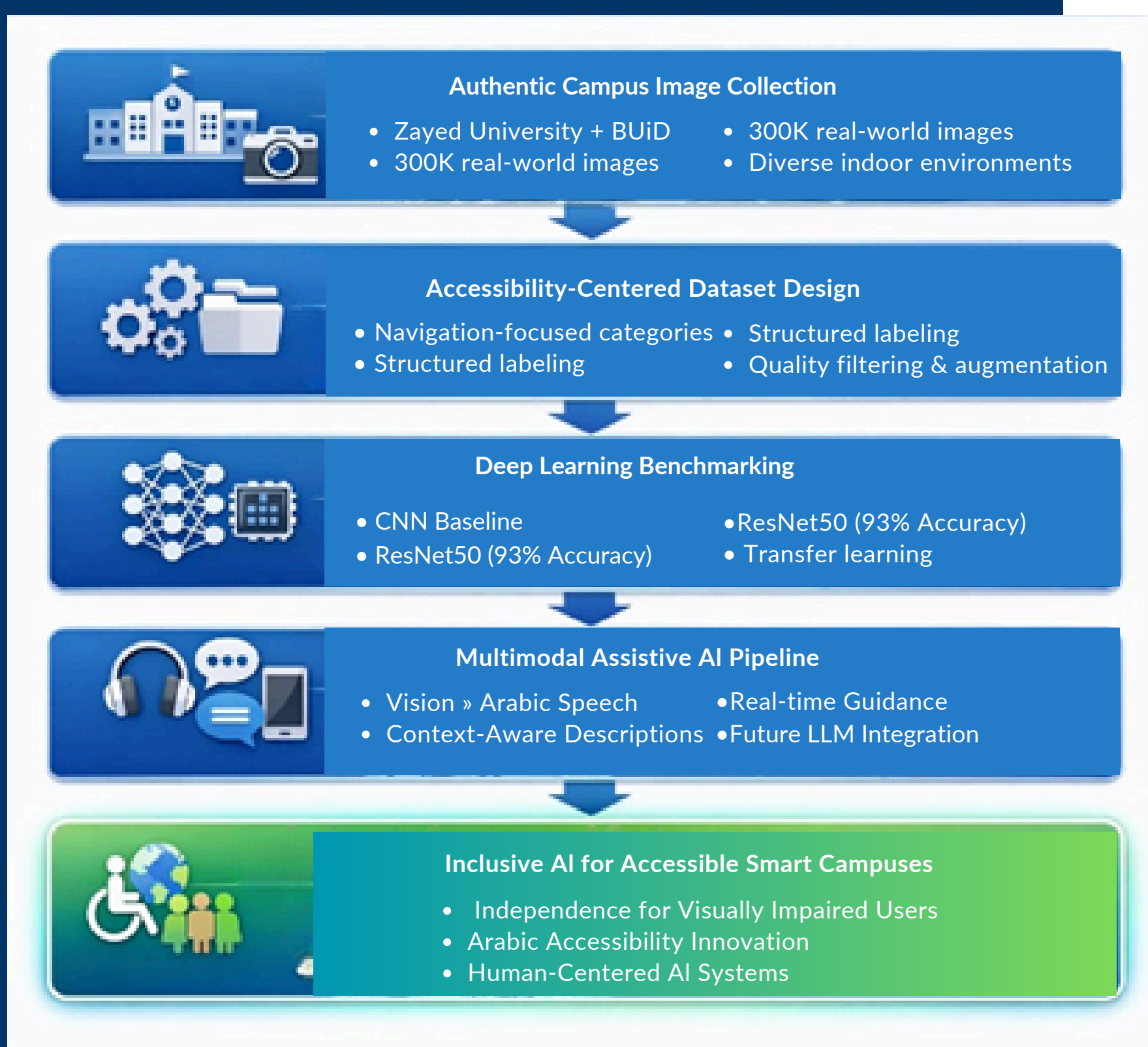
Overall, the findings confirm that large-scale, real-world datasets, when combined with modern deep learning architectures, enable highly reliable indoor scene recognition.

Beyond benchmarking classification performance, the study positions the dataset as a foundation for a broader assistive AI ecosystem. The authors envision integrating the trained vision models with Arabic speech interfaces that convert visual detections into real-time spoken descriptions, enabling intuitive voice-based navigation. Future enhancements include the integration of large language models to provide richer contextual explanations rather than simple object labels, as well as multimodal extensions such as face recognition and environmental sound awareness.

These additions would enable assistive systems to move beyond static recognition toward dynamic situational awareness.

The overall contribution and the assistive AI pipeline are summarized in the figure below. By combining real-world data collection, robust preprocessing, and state-of-the-art deep learning models, this work provides a practical step toward deployable assistive AI systems. More importantly, it underscores the role of inclusive artificial intelligence in empowering visually impaired individuals to navigate academic environments with greater independence and confidence. As universities increasingly adopt smart campus initiatives, datasets and models of this kind can play a critical role in shaping more accessible, inclusive, and human-centered educational spaces.

“Overall, the findings confirm that large-scale, real-world datasets, when combined with modern deep learning architectures, enable highly reliable indoor scene recognition.”



THE PASSING OF CHILDHOOD TRAUMA THROUGH GENERATIONS

by Lemar Enaya

The transmission of childhood trauma across generations has long been overlooked. To examine the correlation between early childhood trauma and its effects on later generations, several studies were reviewed, including the 'Impact of intergenerational trauma on second-generation descendants'.

This review focused on individuals who were second-generation descendants of survivors of war, genocide, apartheid, and natural disasters. The quantitative findings showed that these descendants often had lower cortisol levels as a result of the significant trauma experienced by earlier generations. Furthermore, studies involving first-generation individuals exposed to natural disasters, such as earthquakes, found that their children had smaller bilateral amygdala volumes, linked to their mothers' exposure to the traumatic event. These findings suggest that trauma experienced by one generation can be transmitted both physically and psychologically to the next.

The second article explored the existence of intergenerational trauma and whether traumatic experiences can affect future generations. The findings revealed a strong correlation between traumatic events experienced by one generation and their long-term effects on descendants. This suggests that trauma is not limited

to the individuals who directly experience it, but can also influence future generations through emotional, psychological, and biological mechanisms such as epigenetics and the endocrine system.

The third study found that adults who experienced physical or emotional abuse during childhood, or who were exposed to traumatic environments, were more likely to repeat similar behaviours with their own children. As a result, the next generation may experience many of the same forms of trauma.

A survey of students aged 16–18 revealed mixed childhood experiences. While 48% recalled their early years positively, 30% described a harsh upbringing, and 22% reported neutral experiences. Just over half of the respondents (54%) stated that they grew up in supportive homes, while nearly one-third experienced distant or stressful family environments. Notably, 78% reported witnessing family conflict or emotional strain during childhood.

Many respondents believe their current emotional responses are influenced by their family's past, including trauma, cultural expectations, and parenting styles. More than half reported frequently experiencing unexplained stress or mood changes, suggesting the presence of long-lasting emotional patterns. Encouragingly, a strong majority expressed a determination to create healthier emotional environments for their future children, reflecting a growing commitment to breaking generational cycles of trauma.

The findings of this study highlight how childhood experiences and family environments shape emotional patterns that can carry



forward into adulthood—and even into future generations. Many participants described growing up in homes where stress and conflict were common.

The data also revealed a striking pattern: emotional habits often repeat across generations. Half of the respondents recognised behaviours such as emotional withdrawal, anger, or conflict avoidance that mirrored those of their parents or grandparents, reinforcing research on generational trauma and learned behaviour. Many participants also reported discomfort with emotional expression, suggesting that they were not raised in environments that encouraged open communication. Ongoing anxiety and mood fluctuations were common, further reflecting how unresolved family experiences can contribute to emotional vulnerability.

Overall, the findings confirm that childhood environments and family history strongly influence emotional development. Encouragingly, they also demonstrate growing awareness among younger generations and a determination to break harmful cycles rather than pass them on.

ON DIGITAL DEBT AND INSTITUTIONAL RENEWAL

by Jude Isaac Lobo

The Comfort of "It Still Works"

In institutions, the belief that extending the lifespan of aging infrastructure is a neutral or cost-saving act is a pervasive misconception. There are cases where platforms no longer perform their intended function, but because results are produced and reports are submitted, mostly through tedious human effort, maintaining the status quo can feel responsible. In constrained budget environments, modernisation is frequently deferred in favour of continuity.

Yet longevity is rarely neutral.

Systems that remain in use beyond their intended lifecycles accumulate layers of integrations and workaround processes that increase backend complexity. What appears stable from the outside may depend on manual reconciliations, repurposed data fields, or time-consuming processes that compensate for structural gaps. The institution continues to function, but often through effort rather than alignment.

Past investment also plays a role. Significant initial expenditure can create a form of sunk cost gravity, where modernisation feels like abandoning value rather than strengthening the future. This instinct is understandable, but it can anchor institutions to platforms that no longer align with evolving needs. It is within this tension between stability, compensation, and future readiness that Digital Debt begins to form. It forms slowly through everyday decisions that feel reasonable in isolation.

What is Digital Debt?

The term technical debt is used in technology to describe the long-term cost of short-term compromises. When quick fixes replace thoughtful design, complexity grows, and future



changes become harder. Digital Debt applies this idea at an institutional level.

It refers to the accumulation of deferred modernisation decisions that gradually increase complexity, manual effort, and organisational risk. It forms when core systems are extended beyond their intended lifecycle, when integration layers compensate for structural gaps, and when people adjust their processes to make ageing platforms continue to function.

Digital Debt is not the result of a single mistake. It develops incrementally through practical decisions made under budget constraints, time pressure, and competing priorities. Each decision may seem reasonable in isolation. Over time, however, the combined effect increases operational strain and reduces institutional agility. Unlike system failures, Digital Debt builds quietly. It becomes visible not through collapse, but through growing effort, rising integration complexity and a steady decline in alignment between systems and institutional needs.

The Hidden Cost of Keeping Systems in Place

Keeping legacy systems in place rarely means leaving them unchanged. As institutional needs evolve, ageing platforms are patched, connected, and adapted to perform tasks they were not designed to handle. Interfaces are added, reports are customised, and manual exports fill gaps. What begins as a practical adjustment often becomes permanent structure.

Over time, these fixes reshape the architecture. Integration layers accumulate, and dependencies multiply. What was once straightforward becomes harder to trace and more difficult to modify. The system may still operate, but complexity grows beneath the surface. Introducing new tools requires workarounds. Minor changes demand disproportionate effort. The cost of eventual modernisation increases, not only financially but operationally.

ON DIGITAL DEBT AND INSTITUTIONAL RENEWAL

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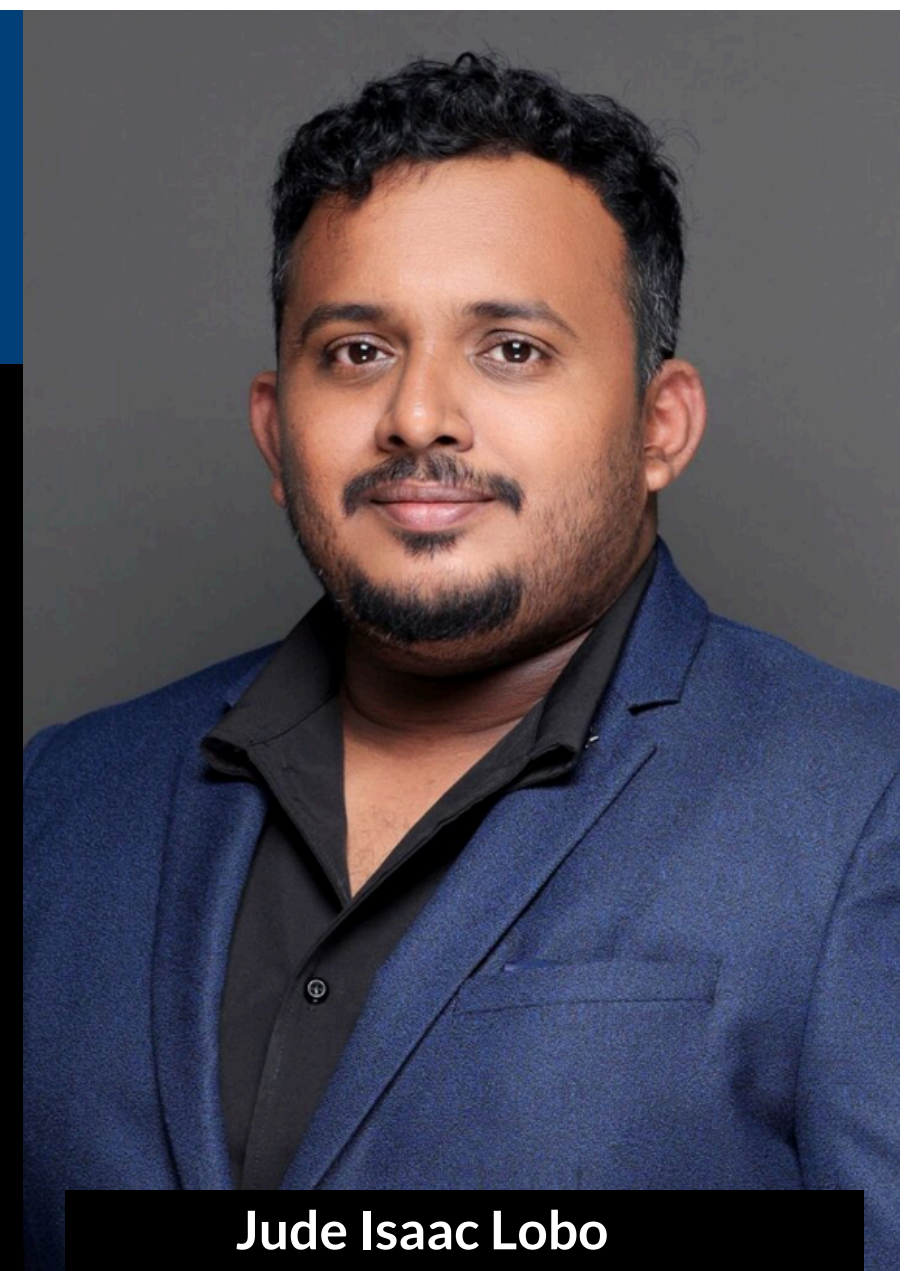
Keeping systems in place can feel less disruptive than replacing them. Yet repeated adaptation often makes future transition more complex and more disruptive than it would have been earlier.

The Human Cost of Digital Debt

As systems age and layers of adaptation accumulate, the burden of alignment shifts from architecture to people.

When platforms do not integrate cleanly, staff compensate. Data is reconciled manually. Information is entered more than once. Reports are reviewed outside the system to ensure accuracy.

These efforts are often invisible. Outputs are delivered and regulatory requirements are met.



Jude Isaac Lobo

In many institutions, this continuity depends on the diligence and professionalism of administrative teams who invest a significant amount of time to sustain coherence across systems.

Over time, however, this transfer of effort carries consequences. Tasks that should be automated become routine manual work. Skilled staff spend time maintaining structural gaps rather than contributing to higher-value institutional priorities. The risk is not immediate failure, but gradual erosion of capacity. Energy that could support innovation, analysis, or service improvement is absorbed by maintenance. Digital Debt accrues interest in human effort. The cost is paid through sustained, often unrecognised labour and through the quiet diversion of talent from its intended purpose.

Governance and Institutional Risk

Debt affects more than workflows. It shapes how institutions manage data, risk, and decision-making. As systems age and layers of adaptation accumulate, reconciling data across platforms becomes harder. Reporting often requires additional validation and manual checks. The institution continues to meet regulatory obligations, but the path to accuracy grows more complex. This complexity has governance implications.

Fragmented data environments undermine the reliability of a single source of truth. Custom integrations increase dependency and reduce flexibility. As interfaces multiply, oversight becomes more intricate, and the margin for error narrows. Digital Debt also reduces agility. Introducing new initiatives or responding to regulatory change requires navigating an architecture shaped by years of incremental adaptation. The institution remains functional, but its ability to move decisively becomes constrained.

The Case for Deliberate Modernisation

Addressing Digital Debt requires more than incremental adjustment. It requires deliberate modernisation guided by lifecycle planning rather than short-term convenience. Modernisation is often perceived as expensive and disruptive. In the short term, it is both. Yet the alternative is the continued accumulation of complexity, manual effort, and structural constraint. While adaptation spreads costs over time, it does not eliminate them. It simply shifts it into hidden operational strain. When undertaken thoughtfully, modernisation reduces integration overhead, restores architectural clarity and realigns systems with institutional priorities. It releases staff capacity from maintenance to higher-value work.

It improves data integrity and strengthens governance. The decision is rarely between cost and no cost.

Stability and Sustainability

Digital Debt does not emerge from neglect. It grows from practical decisions made under constraint, shaped by caution and competing priorities. Each decision may be reasonable at the time. Over time, their cumulative effect reshapes systems, redistributes effort, and limits flexibility. The cost of ageing platforms rarely appears in a single budget line; it shows up as added complexity, manual reconciliation, and reduced agility. Institutions continue to operate, but increasing energy is spent sustaining alignment rather than advancing it. Modernisation is not disruption for its own sake. Core systems are institutional infrastructure and require disciplined lifecycle management. Done deliberately, modernisation restores architectural clarity, strengthens governance, and frees people for higher-value work. Stability matters, but without renewal, the burden shifts from systems to people.

The question is not whether institutions can continue to function, but whether they are willing to realign before effort replaces design.

STUDYING BETWEEN CULTURES: WHAT IT'S LIKE TO BE A UNIVERSITY STUDENT IN DUBAI

by Rania Al-Tanna

Walking onto a university campus in Dubai feels a little like stepping into the world in miniature. In one classroom, you might hear half a dozen accents; in another, a discussion shaped by perspectives from different continents, belief systems, and educational traditions. Studying in Dubai is not just about earning a degree; it is about learning how to exist between cultures, negotiating identity, and developing a global mindset in real time.

For many students, Dubai is neither fully “home” nor entirely foreign. Some grew up here as expatriates, others arrived from abroad for university, and many local students are navigating a global academic environment while remaining rooted in their cultural traditions. This unique mix creates an educational experience that is difficult to replicate elsewhere.

One of the most striking aspects of university life in Dubai is the diversity of the student body. Group discussions rarely reflect a single worldview. A conversation about education, business, sustainability, or technology is often enriched, and sometimes complicated, by cultural differences in communication styles, values, and expectations. What one student sees as confident participation, another may interpret as overly direct. What feels like respectful silence to some may seem like disengagement to others. Learning to read these differences becomes an education in itself.

This cultural negotiation extends beyond the classroom. Social life at university often involves balancing multiple identities. Students may shift effortlessly between languages, dress codes, and social norms depending on the space they occupy. A student might attend lectures conducted in English, spend lunch discussing global politics with international classmates, and return home to a family environment grounded in local traditions and expectations. This constant movement between worlds can be enriching, but it can also be challenging.



Rania Al-Tanna

Many students in Dubai face the quiet pressure of expectations: academic, familial, and societal. For some, success is closely tied to professional achievement and stability. For others, university is a time to explore identity, creativity, and independence. Navigating these sometimes-competing expectations while surrounded by peers with very different life experiences can lead to moments of self-doubt, reflection, and growth.

At the same time, studying in Dubai offers students a rare advantage: exposure. Exposure to global ideas, international academic standards, and real-world issues that transcend borders. Universities here often attract faculty from diverse educational backgrounds, bringing varied teaching styles and academic traditions into the classroom. This diversity challenges students to adapt, question assumptions, and become more flexible learners.

Another defining feature of studying in Dubai is the city itself. Dubai is fast-paced, ambitious, and constantly evolving. It is a place where tradition and innovation exist side by side, where historic neighborhoods coexist with futuristic architecture, and cultural heritage is preserved alongside rapid modernization. For students, this environment reinforces an important lesson: identity does not have to be fixed. It can be layered, dynamic, and adaptable.

STUDYING BETWEEN CULTURES: WHAT IT'S LIKE TO BE A UNIVERSITY STUDENT IN DUBAI

Contd.

However, living between cultures is not always easy. Some students struggle with a sense of belonging, feeling not fully accepted in any one space. Others feel pressure to represent their culture or country, becoming unofficial ambassadors in classroom discussions. There can also be misunderstandings, moments when humor, values, or communication styles do not translate smoothly. These experiences, while uncomfortable at times, often become the moments from which the deepest learning emerges.



Perhaps the most valuable outcome of studying between cultures is the development of empathy. When students listen to stories shaped by different histories, religions, and social realities, they learn to see the world through multiple lenses. This empathy is not taught through textbooks; it is built through conversation, collaboration, and shared experience.

As graduation approaches, many students realize that what they are taking with them is more than academic knowledge.

They leave with cultural awareness, adaptability, and the ability to work with people unlike themselves, skills that are increasingly essential in a globalised world. Employers often speak about “soft skills,” but students in Dubai live these skills daily.

In many ways, being a university student in Dubai means learning how to be comfortable in complexity. It means understanding that identity can be plural, that disagreement need not lead to division, and that growth often happens at the intersection of difference. Learning in a multicultural environment is not always straightforward, but it is deeply transformative, and, for many students, becomes the most meaningful part of their university journey.

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**FOR MANY
STUDENTS, DUBAI IS
NEITHER FULLY
“HOME” NOR
ENTIRELY FOREIGN**



YOUR EYES CAN BE FOOLED. THIS MACHINE CANNOT.

by Hessa Almaazmi & Abdulrahman Alblooshi

Half a million images. Four rented GPUs. One perfect score. Two students at the British University in Dubai built a deepfake detector that can see what human eyes physically cannot — and it has profound implications for the UAE's digital future.

Take any photograph.

Hidden inside it — invisible to every human who has ever looked at an image — is a mathematical signature written in frequencies. Real cameras write one kind. Artificial intelligence writes another. For most of history, no one bothered learning to read the difference. Two students in Dubai decided it was time.

The project is called Adasa. Built by Hessa Almaazmi and Abdulrahman Alblooshi at the British University in Dubai, under the supervision of Dr. Manar Alkhatib, it is a deepfake detection system that doesn't try to analyse AI-generated images the way humans do. It reads their hidden spectral fingerprints. When tested against 750 synthetic images from the world's most advanced generators, it missed exactly none of them.

The deepfake detection arms race has a fundamental structural problem: every time a new detector learns to spot a particular type of fake, the generators improve and the tells disappear. Systems trained on

StyleGAN images fail on Stable Diffusion. Systems that catch DALL-E outputs stumble on Midjourney. The result is a graveyard of detectors that performed brilliantly in the lab only to collapse the moment they encountered a fake they hadn't been specifically trained to recognise.

The Adasa team understood this from the start, which is why the scale and diversity of their training data were not an afterthought — they were the core strategy. The team built the dataset across three deliberate phases, renting progressively more powerful GPU hardware as the data volumes grew beyond what any single machine could reasonably handle.

Phase one used RVF10K from Kaggle: 11,421 images (7,651 training / 1,888 validation / 1,882 testing), all featuring StyleGAN2-generated fakes. A clean scientific baseline.

Their foundational ResNet-50 model scored 98.03 percent accuracy here.

Phase two expanded to more than 500,000 images across five sources — the Kaggle 140k real-and-fake faces dataset, CIPLab, Facebook's DeepFake Detection Challenge

corpus, DiffusionDB and OpenFake from Hugging Face — covering StyleGAN, ProGAN, and Stable Diffusion. By this stage they had burned through a T4, an L4, and an A100. The final model required an NVIDIA H100 with 80 gigabytes of VRAM — the class of hardware used to train language models.

Phase three stress-tested the finished system against 50,000+ images generated fresh through the commercial APIs of Stability AI's SDXL, OpenAI's DALL-E 3, and Midjourney v6.

The technical core of Adasa is a 39-channel frequency analysis — far beyond the 3 to 6 channels used in most published systems. It simultaneously combines Fast Fourier Transform magnitude and phase, Discrete Cosine Transform coefficients, per-colour-channel frequency breakdowns, frequency band separation, and Haar wavelet decomposition. Think of it as the difference between hearing a song and reading its full orchestral score.

That frequency stream feeds into a five-stream architecture alongside Vision Transformers, Inception-v3, DenseNet-121, and a forensic metadata analyser that reads noise patterns, compression signatures, and the telltale absence of camera EXIF data. All five streams report to an eight-headed attention layer that learns, image by image, which evidence to weight most heavily.

A secondary classifier can even identify which of five AI systems — StyleGAN, ProGAN, Stable Diffusion, SDXL, or DALL-E — produced a given fake.



Hessa Almaazmi



YOUR EYES CAN BE FOOLED. THIS MACHINE CANNOT.

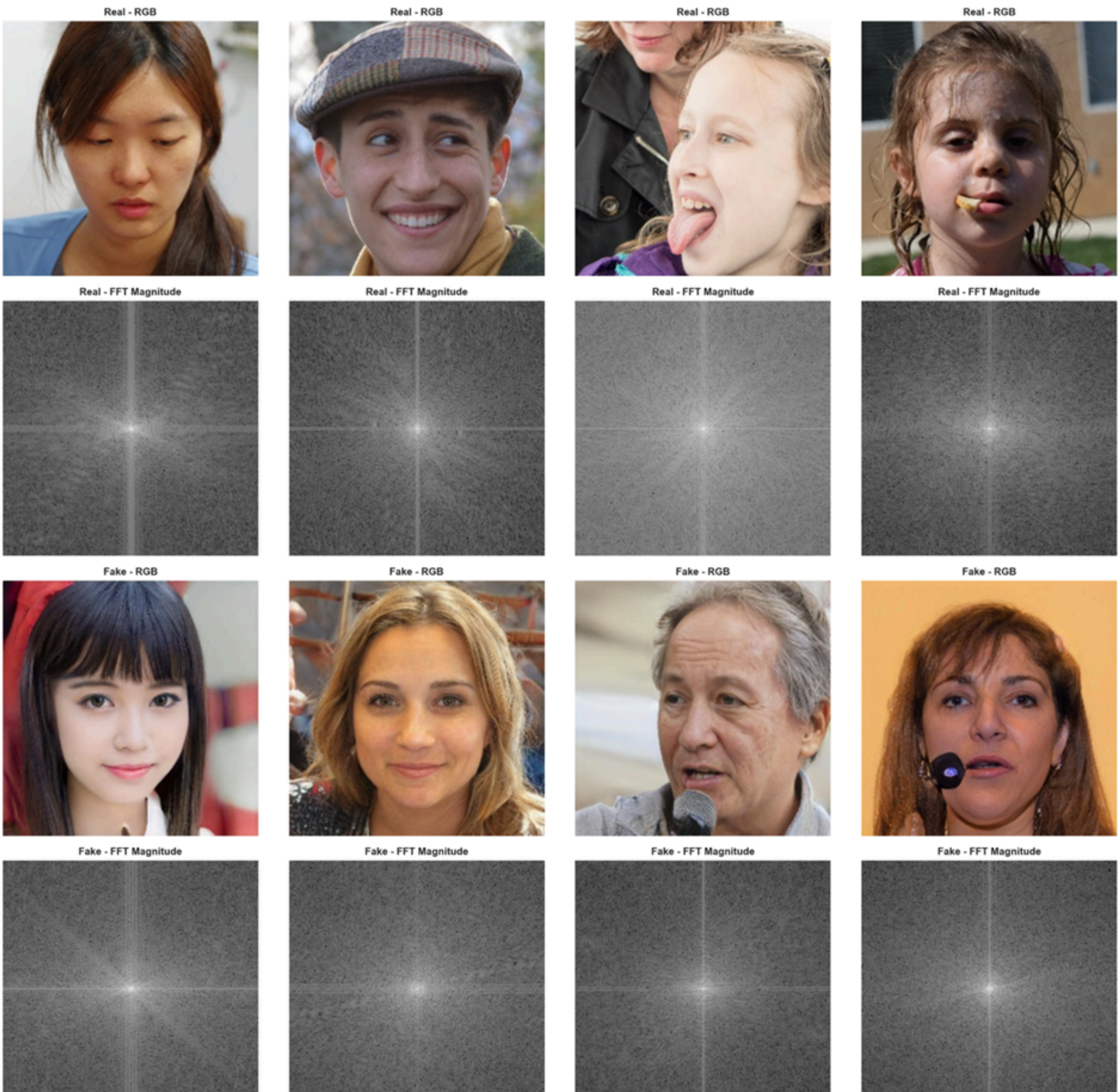
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THE NUMBERS • PHASE BY PHASE

- **Phase 1** — ResNet-50 baseline: 98.03% accuracy | 11,421 images (RVF10K / Kaggle)
- **Phase 2** — Adasa v1 + Frequency: 98.09% accuracy, ROC-AUC 99.84% | 500,000+ images
- **Phase 3** — CNN-LSTM + Temporal: 98.30% accuracy, 99.26% recall | 935 / 942 fakes caught
- **Phase 4** — Adasa v2, Full Fusion: 99.65% accuracy, ROC-AUC 99.98% | 750 / 750 — zero missed
- **Cross-domain (unseen data):** 99.43% on 21,000 images it had never seen
- **Data sources:** RVF10K • Kaggle 140k • CIPLab • DFDC • DiffusionDB • OpenFake • SDXL • DALL-E 3 • Midjourney v6
- **Generator attribution:** Identifies which of 5 AI systems produced a fake image
- **Production footprint:** 125 MB — deployable on a smartphone.



Abdulrahman Alblooshi



WHAT IT MEANS FOR THE UAE — AND EVERYONE ELSE

The UAE's National AI Strategy 2031 rests on three pillars that Adasa directly addresses: responsible AI, digital trust, and technological leadership. Deepfake-driven fraud, fabricated evidence, and synthetic impersonation are not abstract future threats — they are active, present-tense problems for every government, institution, and individual operating in the digital world. A detector that fits in 125 megabytes, runs in under 50 milliseconds per

image, can identify not only that an image is fake but also which AI system produced it, and comes wrapped in a deployable web application, which is not a university project. It is infrastructure.

The arms race will continue. The generators will improve. But two students in Dubai — with rented cloud GPUs, nine datasets, and a willingness to look at images in ways the human eye never could — just moved the line considerably further in the right direction.

*750 real images. 750 AI fakes. Zero errors.
The machine did not hesitate once.*



Dr Rekha Pillai

FROM READING TO SPEAKING: 15 MINUTES TO SPEAK LIKE A LEADER

“THE ART OF COMMUNICATION IS THE LANGUAGE OF LEADERSHIP.” — JAMES HUMES

by Dr Rekha Pillai

“Speak clearly, if you speak at all; carve every word before you let it fall.”
Oliver Wendell Holmes Sr.

Recently, I came across several advertisements on YouTube promoting articulation courses that promise confidence, fluency, and success, often at a ‘huge price’. This made me put on my thinking cap because honestly, my dear students, you can develop this skill without paying for it. What you need is not a course, but consistency, awareness, and a simple daily method.

Articulation is not about using complex vocabulary or speaking fast. It is about clarity of thought and the ability to express ideas in a structured and confident way. Research consistently shows that communication is one of the most valued skills in the workplace. According to the National Association of Colleges and Employers, communication remains a core competency expected by employers, with around 70% prioritising it. Similarly, the Graduate Management Admission Council highlights communication as one of

the top skills required for career progression and leadership roles. The encouraging reality is that you can begin building articulation today.

All you need is 15 minutes, a piece of text, and the willingness to practice every day. The process is simpler than you think, and here are five golden steps that can transform your articulation in just 15 minutes a day.

Step 1: Read with Purpose (5 minutes)

Pick a short article, paragraph, or editorial. As you read, don’t rush. Ask yourself what the main idea is, and which words or phrases stand out? This trains your mind to think in a structured way. Good articulation always begins with clear thinking.

Step 2: Read Aloud (4 minutes)

Now read the same passage aloud. Focus on pronunciation, pauses,



tone, and emphasis. This step connects reading with speaking and improves your natural flow of expression.

Step 3: Summarize in Your Own Words (3 minutes)

Close the text and explain what you read as if you were telling someone else. Avoid repeating sentences and try to use your own words. This step forces you to understand deeply and express clearly.

Step 4: Record and Reflect (2 minutes)

Record yourself speaking for a minute or two. Then listen and evaluate your clarity, hesitation, and structure. Self-awareness is key to improvement. You can also speak in front of the mirror, as this gives you an idea of your body language while speaking.

Step 5: Learn One New Expression (1 minute)

Pick one word or phrase from what you read and try to use it later. Over time, this builds your vocabulary naturally.

This routine combines reading, speaking, thinking, and reflection. You are not just consuming information but transforming it into expression.

For articulation training, I strongly advise you all to start early. By the time you graduate, you will not just have knowledge, you will have the confidence and clarity to express it effectively, setting you apart in interviews, presentations, and professional environments. It is these small daily efforts that create a lasting change because, in the end, success is not just about what you know, it is about how clearly and confidently you can express it.

“Speak clearly, if you speak at all; carve every word before you let it fall.”

Oliver Wendell Holmes Sr.

RE-BLOCK: CONNECTIONS

“BIO-BRICK: FROM WASTE TO WORTH. SHAPING THE FUTURE OF ECO-CONSTRUCTION.”

by Abdulla Alblooshi & Salma Amarah

What is RE-BLOCK?

According to available estimates, around 3.27 million tonnes of food may be wasted annually in the UAE, with a reported economic impact of approximately \$3.5 billion. Bread and bakery products are believed to account for a considerable proportion of household food waste. In addition, some reports suggest that approximately 63% of individuals who do not separate food waste attribute this to limited waste-separation infrastructure. These concerns have encouraged exploration into more sustainable approaches to waste management and material reuse. Within this context, the concept of RE-BLOCK was developed, with the company’s name reflecting a broader long-term vision of investigating whether different organic waste materials could potentially be re-engineered into building-related products, with bread waste serving as the initial focus. The project is centred on examining whether discarded bread can be processed into a usable construction material. One proposed outcome of this initiative is BIO-BRICK, described as a biodegradable building block derived from commercial bread waste. The project has also been shortlisted for The British



University in Dubai’s 2026 Seed Funding Competition.

In the UAE, bread waste is more than just a domestic problem. Every day, it passes through hotel buffets, commercial bakeries, and food service establishments. In keeping with UN Sustainable Development Goal 12.3, the nation has pledged to cut food waste in half by 2030; however, there is still a lack of infrastructure to divert certain waste streams, such as bread. While existing solutions such as composting, redistribution, and donation keep bread in the food chain, they cannot generate long-term economic value from the waste. The question of whether there was a more durable solution served as the foundation for RE-BLOCK.

Solution Definition: BIO-BRICK

RE-BLOCK repositioned bread waste as a raw material opportunity for building an entirely new industry, rather than treating it as a food problem. Developing this concept required a shift from waste management to materials science, viewing bread as a compressible, carbon-rich resource

with real industrial potential rather than as leftover food. The product, known as BIO-BRICK, is a long-lasting, biodegradable building block made entirely from leftover commercial bread waste. It is cured without kiln firing and bound with natural materials such as starch or plant-based resin.

Prototype and Possible Uses

The process begins by collecting surplus bread from nearby bakeries, drying and grinding it into a fine powder, then combining it with a natural binder such as starch, alginate, or a plant-based resin. The mixture is pressed into brick moulds and either air-dried or cured at low heat.



Abdulla Alblooshi

Afterward, the brick's strength, durability, and water resistance are evaluated. BIO-BRICK has several non-structural uses, including internal partition walls, thermal insulation panels, lightweight filler for decorative and artistic casting, and reducing structural dead load in buildings. It is not intended to replace materials that can support weight.

Its strength lies in meeting a substantial portion of a building's material requirements where structural capacity is less important than sustainability.

Feasibility and Partner Benefits

The business model is designed to create value in two ways. To collect their extra bread, bakery partners pay RE-BLOCK a tipping fee, converting what was once a disposal expense into a managed service. RE-BLOCK then turns that bread into BIOBRICK units, which are sold as a second source of income to the construction industry. Because of this dual model, the raw material effectively pays to be collected before being processed and sold again. The agreement offers bakery partners a structured, recurring collection service while completely relieving them of disposal logistics. The low-energy production method, which completely does away with kiln firing, keeps RE-BLOCK's operating expenses low, resulting in an overall cost structure that is far more advantageous than traditional brick manufacturing.

Website (Concept Design)

To consolidate all project ideas into a single window, a web platform was developed as a rough concept design to support the RE-BLOCK vision. The web page is accessible at <https://reblock-and-partners.netlify.app/>. The platform contains two panels; one is a public-facing page that contains “all you need to know” about the project. The second page is accessible only to RE-BLOCK's admins, where partners are managed. The platform is at an early-stage concept design and is not a final product certified for commercial use.

How BIO-BRICK Stands Apart

In the UAE, two competitors address food waste and bread. The Waste Lab composts mixed food waste, and NúaFEEDs turns excess bread into animal feed. Both create value from waste, but each is limited. The Waste Lab is constrained by the size and expense of composting operations, while NúaFEEDs is constrained by the ceiling of feed market demand. Instead of focusing on landscaping or agriculture, BIO-BRICK enters a completely new market: construction. Additionally, it uses a scalable model based on modular processing units constructed close to partner bakeries, which lowers logistics costs and lets production increase in response to demand rather than being constrained by it.

Challenges and Action Plan

Three main challenges that still need to be addressed are obtaining legal use certification, product spoilage, and proving structural durability. Given these challenges, their action plan can be as follows: durability can be maintained through experimentation with various binder ratios and by mixing in fibre-based reinforcements such as sawdust or straw. To manage spoilage, employ moisture sensors and vacuum drying technology. Lastly, legal approvals for permissible use can be obtained through legitimate lab-based testing conducted to pursue material certification. There is a long way to go before commercial viability is achieved, but the foundation is there.



RE-BLOCK: CONNECTIONS

UNDERSTANDING MULTILINGUAL TRAFFIC SIGNS IN SMART CITIES

by Manar Alkhatib, Aaya Ehab Alkiamy, Rana Yahya, Salma Amara, Reem Bin Haider, Alia Al Ali



A Practical Approach to Smarter, Safer Road Systems

Modern urban roads are more complex than ever. Traffic signs no longer rely solely on symbols; they frequently combine visual elements with written instructions in multiple languages. In cities where Arabic, English, and French coexist, a single sign may carry layered information that must be interpreted quickly and accurately.

While this is manageable for human drivers, it poses a significant challenge for intelligent systems such as driver assistance technologies and autonomous vehicles. Recognising a sign is no longer enough. True functionality requires understanding its meaning.

The Gap Between Recognition and Understanding

Most existing traffic sign recognition systems are highly effective when dealing with simple, symbolic signs. However, their performance declines when textual information becomes essential.

This limitation stems from the way such systems are

typically designed. Visual recognition models focus on shapes, colours, and patterns, while text recognition systems operate separately. As a result, they fail to deliver a complete interpretation when both visual and textual elements are present within the same sign. In multilingual environments, this gap becomes even more pronounced. Variations in script, font, and layout—particularly with cursive writing systems such as Arabic—introduce additional complexity that traditional methods struggle to handle.

A Unified Approach to Traffic Sign Interpretation

To address this challenge, the work introduces a structured, end-to-end approach that combines visual recognition with selective text interpretation.

The system first analyses the visual characteristics of a traffic sign and determines its category. Based on this classification, it decides whether textual information is relevant. Only signs that contain meaningful text are passed to a secondary stage for text extraction and interpretation. This conditional process improves both efficiency and accuracy. Instead of applying text recognition universally, the system focuses on computational effort where it is truly needed.

Learning from Real-World Conditions

A key aspect of this work is the emphasis on realism. Rather than relying on idealised datasets, the system was trained using over six thousand traffic sign images collected from actual urban environments.

These images reflect real driving conditions, including variations in lighting, perspective, background clutter, and physical degradation of signs. By incorporating such variability into the training process, the system is better equipped to generalise and perform reliably outside controlled environments.

This focus on practical data ensures that the solution remains relevant for real-world deployment rather than being limited to laboratory performance.

Evaluating Visual Recognition Models

To identify the most suitable approach for visual classification, two well-established deep learning models were evaluated. Both demonstrated strong performance in recognising traffic sign categories. However, one model showed a clear advantage in handling visually complex scenarios.

It achieved a better balance between accuracy, robustness, and computational efficiency, making it more appropriate for real-time applications where consistent performance is critical.

Interpreting Multilingual Text

Extracting text from traffic signs introduces a different set of challenges. Traditional text recognition systems perform adequately on clean, high-contrast English text but struggle significantly with multilingual content and non-Latin scripts.

In contrast, more advanced, learning-based approaches demonstrate stronger adaptability. They are better suited to handling variations in script, orientation, and environmental conditions. This distinction becomes particularly important when working with Arabic text and mixed-language signage.

The evaluation highlights the importance of selecting text recognition methods that align with the complexity of real-world environments.

Efficiency Through Selective Processing

One of the defining features of the system is its ability to prioritise tasks. Text recognition is applied only when the initial classification indicates that it is necessary. This selective strategy reduces computational overhead and enables faster processing without compromising interpretability. In time-sensitive scenarios such as driving, this balance between speed and accuracy is essential.

“Traffic signs no longer rely solely on symbols; they frequently combine visual elements with written instructions in multiple languages”

Implications for Smart Mobility

The ability to interpret multilingual traffic signs has direct implications for modern transportation systems. It enhances the reliability of driver assistance technologies and contributes to safer navigation in complex urban environments. For autonomous systems, the impact is even greater.



Understanding the meaning of a sign—not just detecting its presence—supports better decision-making, route planning, and compliance with road regulations.

Additionally, such systems can improve accessibility by assisting individuals who may have difficulties in reading or understanding unfamiliar languages.

Future Directions

Further development will focus on extending the system to real-time applications using continuous video input. Integrating additional data sources, such as spatial sensors and positioning systems, could also enhance contextual awareness and reliability. Another important direction involves optimising the system for deployment on embedded platforms, enabling practical use in vehicles and smart infrastructure without requiring extensive computational resources.

Conclusion

Interpreting traffic signs in multilingual urban environments requires more than visual recognition. It demands a combination of perception and understanding. By integrating visual classification with conditional text interpretation, this work presents a practical step toward bridging that gap. The result is a system that moves beyond detection and toward meaningful comprehension, supporting the development of safer and more intelligent transportation systems.

BEYOND BUZZWORDS: THE AI INTEGRATION COMMITTEE'S JOURNEY FROM IDEAS TO IMPACT

by AI Integration Committee



“AI at BUiD is no longer a distant concept – it has become a purposeful, integrated part of university life.”

THREE PILLARS OF INTEGRATION



POLICY DEVELOPMENT

Ethical, transparent AI frameworks covering all university activities.



TRAINING & AI LITERACY

Empowering admin staff and academics to engage with AI confidently.



ASSESSMENT INNOVATION

Redesigning evaluation to reflect AI as a legitimate academic tool.

In an era defined by rapid technological evolution, BUiD's AI Integration Committee has become one of the university's most quietly transformative forces. What began as a handful of exploratory discussions has grown into a coordinated, university-wide movement, reimagining not only teaching and research, but also the ways in which members of our community engage with work, services, and daily routines.

The committee's guiding philosophy has never been to chase the latest trend. Instead, it has chosen a more deliberate path: thoughtful, responsible, and future-ready integration rooted in three foundational pillars.



Turning Policy into Practice

One of the committee's most significant achievements has been the rollout of the Generative AI Usage Guidelines, a clear framework for ethical, transparent AI use across the institution. Alongside it, the AI Assessment, Reporting, and Attribution (AIRA) Scale now appears in every module descriptor, ensuring that students know exactly how AI may or may not be used in each course.

To reinforce accountability, an AI Usage Declaration is now required in all theses and dissertations, prompting students to disclose and take ownership of any AI-assisted work. Together, these measures uphold academic integrity while recognising AI as a legitimate and evolving tool.



Empowering People Through Training

The committee recognised early on that meaningful AI integration begins not with software or systems, but with people. This commitment led to AI Unbound 2025, a flagship symposium bringing together academic and administrative staff to explore what AI means for higher education.

From classroom use to administrative workflows, the event sparked conversation, curiosity, and confidence, helping to demystify AI and inspire practical experimentation across the university.



Understanding How AI Is Being Used

To better track AI adoption, the committee launched the AI Implementation & Use-Case Registry Form, a systematic effort to document how faculty and administrators actually use AI in daily workflows.

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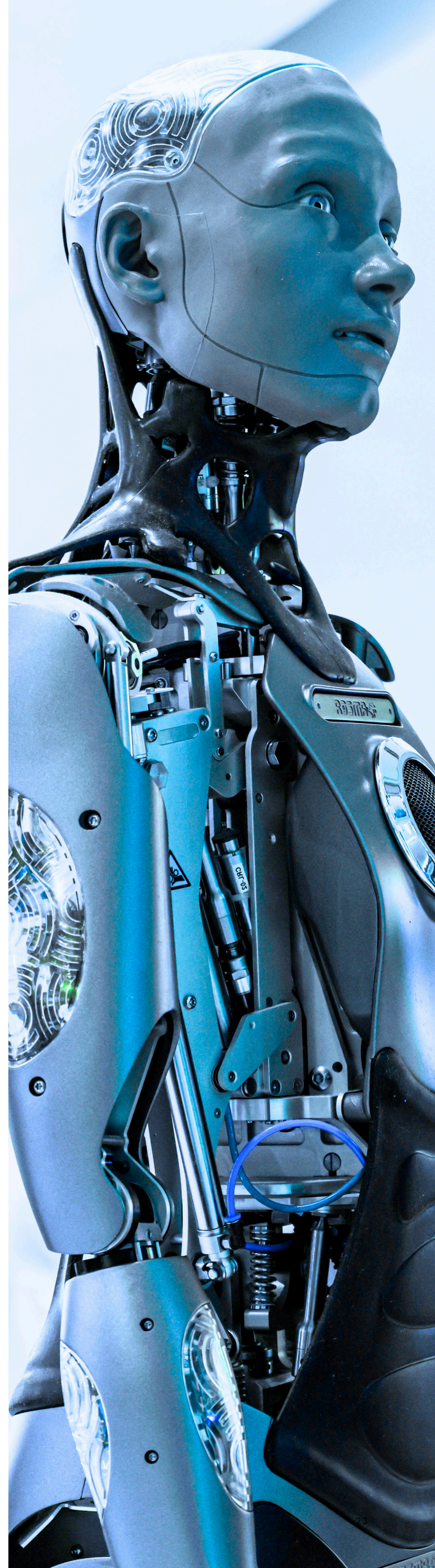
Initial data indicate a consistent rise in AI adoption, with academic and administrative staff using it to streamline communication, develop courses, and assist in assessment. These insights are guiding future training initiatives and strategic planning.

“Meaningful AI integration begins not with software or systems, but with people.”

Looking Ahead

The next phase of BUiD's AI journey is already taking shape. Structured, department-specific workshops will bring targeted training where it is needed most. The committee is also exploring institutional AI platforms and licensing arrangements that could expand access university-wide. Ongoing evaluation frameworks will ensure that AI's impact on teaching, research, and administration is measured, and that BUiD continues to lead with evidence and intention.

AI at BUiD is no longer a question of whether; it is a question of how. Through clear policies, dedicated training, and innovative assessment strategies, the AI Integration Committee is helping BUiD not merely adapt to the future but actively shape it



THE RIPPLE EFFECT

by Immaculata Ofurum

Every choice we make sends ripples through the people and communities around us. Some ripples bring growth and light. Others, though unintended, create disruption. That's why the ancient principle of "First, Do No Harm" reminds us to act thoughtfully, consider the wider impact of our actions, and take responsibility for the waves we create. In our daily work, whether mentoring students, collaborating on projects, or supporting colleagues. Small decisions can resonate far beyond what we see, shaping the experiences and outcomes of those around us.

In a peaceful valley surrounded by winding hills, the villagers prepared each year for the Night of Lantern Paths. Hundreds of lanterns lined the trails, guiding everyone toward the central square. Each lantern, no matter how small, played its part in lighting the way.

One lantern hung at the far end of a narrow footpath. It belonged to Lio, a well-liked villager with many tasks scattered throughout his day. "I'll light it later," he thought. "It's only one lantern. The others will keep the valley bright."



When the festival began, lanterns flickered to life in a beautiful chain of golden light.

The glow moved like a wave across the hills until it reached Lio's path. There, the wave paused.

Travellers approaching from the far end paused, unsure where the path continued. Those behind them slowed too, uncertain and hesitant. Further up the hill, the musicians waited for the signal that all paths were lit. The dancers held their opening pose a little longer. Even the cooks delayed bringing out the final dishes, unsure when the last group would arrive.

The celebration shifted, not with blame or anger, but with a subtle imbalance. In that quiet difference, the truth became clear that something small, easy to overlook, can disrupt the flow of the festival night.

Later, as the festivities settled, Lio walked the lantern trail. He saw the rolling hills glowing beautifully, yet imperfectly, with a small gap in the chain where his lantern should have shone. For the first time, he understood that even one delayed task, one missed or procrastinated moment, could ripple outward, shifting the rhythm and harmony of the entire valley. It wasn't about blame; it was simply about the impact each person carried.

Standing beneath his lantern, he lit it and watched the soft glow fill the darkness. In that moment, he realised that every lantern, no matter how small or hidden, contribute to the whole community shinations. From then on, the villagers understood that when each person tends to their lantern with care and timeliness, the entire valley glows brighter.

Every choice, however small, becomes part of a larger story. Like lanterns along a path, our actions, timely or delayed, shape how others move and succeed. Acting with intention creates a brighter and more connected environment. The ripples created today become the culture we walk through tomorrow.

BUiD COMMUNITY ACHIEVEMENTS AND NEW APPOINTMENTS

Celebrating Excellence: BUiD Community Continues to Shine

The British University in Dubai (BUiD) continues to strengthen its position as a leading institution for academic excellence research impact, and innovation through the outstanding achievements of its faculty, students, alumni, and administrative staff.

International Recognition for Research Excellence

BUiD is delighted to celebrate Professor Khaled Shaalan, who has earned 22nd place in the UAE, in the 2026 edition of Research.com’s Computer Science rankings. The ranking is based on the highly regarded Discipline H-index (D-index), which measures the impact and influence of researchers through their publications and citations. Adding to this success, the ranking also features two other scholars closely associated with BUiD: Dr Mostafa Al-Emran and Dr Saed Salloum, a distinguished BUiD alumnus. Their inclusion among the UAE’s top computer science researchers highlights the enduring impact of BUiD’s academic community.

World	National	Scholar	D-Index	Citations	Publications
3910	22	 Khaled Shaalan British University in Dubai, United Arab Emirates	56	14,614	314

World	National	Scholar	D-Index	Citations	Publications
3014	20	 Mostafa Al-Emran Victoria University, United Arab Emirates	61	13,463	136

World	National	Scholar	D-Index	Citations	Publications
2176	16	 Saied A. Salloum Horizon University College, United Arab Emirates	67	12,759	195

<https://research.com/scientists-rankings/computer-science/ae>



Student Excellence Recognised at the National Level

BUiD student Hessa Almaazmi has been awarded the prestigious Hamdan bin Rashid Al Maktoum Foundation Award for Distinguished Undergraduate University Student – Academic Excellence..

Notably, she was the only student across the UAE to receive this honour in recognition of her achievements in Artificial Intelligence, Cybersecurity, Innovation, and Digital Transformation.



Contd.

BUID Community Achievements

BUID also congratulates two members of its administrative staff on successfully completing their doctoral studies.

Dr Salam Khoury has earned a PhD in Business Management, having previously completed her MBA at BUID.



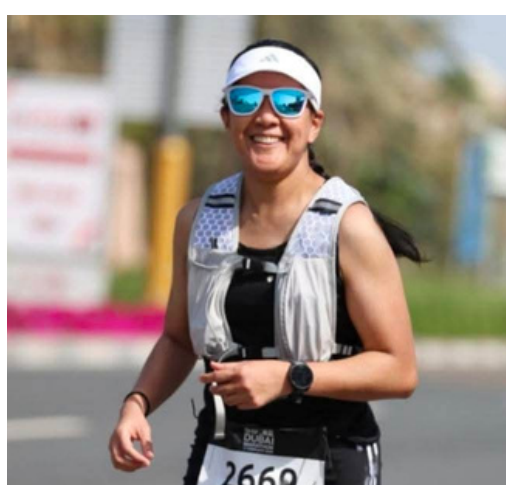
Dr Salam Khoury

Dr. Jammal holds an MBA degree as well as a PhD degree in Education.



Dr. Mohammed Jammal

BUID also celebrates achievements beyond academia. On the 1st of February 2026, Christine Salvador completed her fourth marathon at the Dubai Marathon, covering the full 42.2 km distance. She described the experience as "incredibly rewarding" and said that the marathon is "a test of both willpower and physical strength". Despite calling it "a brutal event", Christine added that she is already looking forward to taking on the challenge again.



Christine Salvador



Welcoming New Academic Talent

BUID is pleased to welcome a distinguished group of academics whose expertise, research achievements, and industry experience will further strengthen the University's commitment to excellence in teaching, learning, and innovation.

Dr Alexandria Proff joins the Faculty of Education as an Associate Professor with more than 15 years of experience in higher education, academic leadership, and curriculum development.



Dr Alexandria Proff

Dr Ghada Ussain Alsuhli joins the Faculty of Engineering and IT as an Assistant Professor specialising in Artificial Intelligence.



Dr Ghada Ussain Alsuhli

Dr Andrea Espinel Rojas joins the Faculty of Engineering and IT as a Lecturer specialising in Artificial Intelligence, cryptographic systems, and theoretical computing.



Dr Andrea Espinel Rojas



PDI: A STRATEGIC GROWTH STORY — HOW BUSINESS THINKING TRANSFORMED OUR DEPARTMENT

by **Nabeela D'sa**

Over the past three years, the Professional Development Institute (PDI) has demonstrated how a small, agile department can deliver high-impact growth through strategic planning, market awareness, and disciplined execution. During this period, PDI has expanded partnerships, introduced innovative programmes, and strengthened academic pathways—while intentionally applying business principles that every reader can learn from. PDI has evolved into one of the university's most forward-thinking departments. Our achievements were not accidental; they were driven by business strategy frameworks, rigorous market analysis, and agile execution models that keep the department future-focused and industry-aligned.

A core strength of PDI is its ability to achieve more with less. Through effective resource optimisation, strategic prioritisation, operational efficiency, and rapid implementation cycles, the team consistently delivers measurable outcomes with precision and speed.

Strategic Global Growth: Applying Opportunity Analysis for the ASEM Collaboration

A major highlight of PDI's growth has been the introduction of the partnership with the American Society for Engineering Management (ASEM). This collaboration was selected through competitive analysis, opportunity mapping, and long-term value evaluation—key components of strategic opportunity assessment. Through ASEM, PDI now offers the Certified Professional in Engineering Management (CPEM) and Six Sigma Green Belt (SSGB) certifications. These programmes elevate our international profile and position PDI as a regional leader in professional learning.

Learning Insight:

Strategic partnerships must be built on data and long-term value—not convenience. PDI applied this principle to secure a partner that strengthens global credibility and broadens certification pathways.

Building Future-Ready Capabilities: The SOLAR PV Professional Course

To support the UAE's rapid transition to renewable energy, PDI leveraged market-driven strategy and environmental scanning to identify a growing

sector with national relevance. This led to signing an addendum with the Association of Energy Engineers (AEE) to introduce the SOLAR PV Professional Course. PDI conducted a structured environmental scan examining:

- Industry trends
- Technological shifts
- National sustainability goals
- Workforce skill shortages

This strategic assessment positioned PDI to enter the renewable-energy training market at the ideal time.

Learning Insight:

Organisations that proactively scan their environment spot opportunities early and build future-ready offerings. This approach has allowed PDI to stay ahead of competitors in a high-growth sector.

Expanding Academic Pathways: New MOUs for HND Qualifications

To address emerging workforce needs, PDI used skills-gap analysis to guide new programme development—another fundamental business practice that matches market demand with talent supply. Based on these insights, PDI secured a new MOU to offer:

- Higher National Diploma / Certificate in Project Management
- Higher National Diploma / Certificate in Accounting and Business
- Higher National Diploma / Certificate in Cyber Security

These programmes respond to some of the region's most in-demand career fields and expand academic pathways for students and corporate learners alike. The added qualifications further diversify PDI's portfolio and reinforce our commitment to industry-aligned, vocational education.

PDI: A STRATEGIC GROWTH STORY — HOW BUSINESS THINKING TRANSFORMED OUR DEPARTMENT

by **Nabeela D'sa**

Learning Insight:

Successful organisations design products based on market needs, not assumptions. By using datadriven decision making, PDI ensured its academic offerings match real workforce demand.

A Strategy-Driven Vision

Over the past three years, all PDI initiatives have been aligned with a clear strategic goal: becoming the preferred training partner for major corporate organisations in the region. To support this ambition, PDI has adopted a focused approach to brand positioning, emphasising:

- Sharpening a clear value proposition
- Highlighting our agility and customised training capabilities
- Strengthening engagement within industry networks
- Aligning all programmes with employer expectations

This deliberate approach positions PDI not merely as an academic department, but as a trusted, and responsive corporate training provider.

Learning Insight:

Organisations grow fastest when they define who they are, what they offer, and why they matter. PDI's brand-driven strategy strengthens long-term market relevance.



Driving Excellence Through Lean Practices

PDI's operational success is rooted in lean management principles, which have enhanced team efficiency and overall performance. This includes:

- Resource prioritisation – focusing on high-impact initiatives
- Process optimisation – simplifying workflows and reducing bottlenecks
- Rapid implementation cycles – launching quickly, refining continuously
- Cross-functional teamwork – maximising strengths across the team

The outcome is a department that operates with clarity, speed, and measurable output.

Learning Insight:

High-performing teams succeed by removing waste, focusing on priority tasks, and empowering people. PDI's lean approach is a replicable model for other departments.

Conclusion: Strategy, Discipline, and Purpose in Action

PDI's transformation shows that with the right strategic mindset, even lean teams can achieve extraordinary impact. Through competitive positioning, strong stakeholder engagement, and agile, market-responsive programme design, PDI has built a reputation as a high-achieving, solution-driven department that consistently delivers, adapts, and moves with purpose.



Nabeela D'sa



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PDI offers industry-recognised certification and development courses to help you grow your expertise and drive real results.

Lead Smarter. Manage Impact. Become Certified!







TRUST & QUALITY



CERTIFICATIONS



ELITES



PROCTORING



EXAMINATIONS

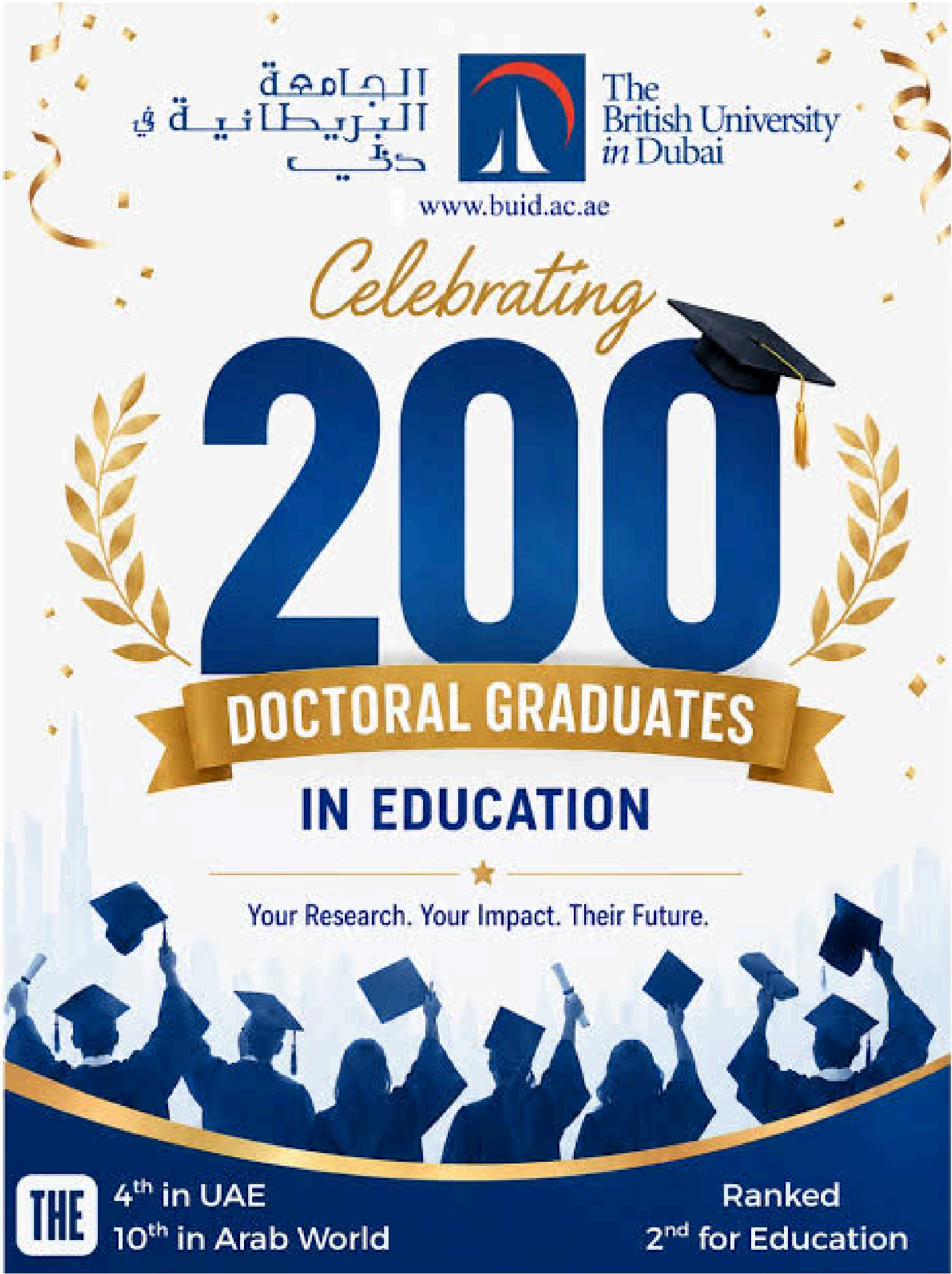
CDA-BUiD MoU SIGNING CEREMONY



On 29 March 2026, the British University in Dubai (BUiD) and the Community Development Authority (CDA) signed a Memorandum of Understanding (MoU) to strengthen collaboration to develop and advance social professions in Dubai. The partnership reflects a shared commitment to empowering national talent, enhancing professional standards, and supporting the objectives of the Dubai Social Agenda 33. Through this strategic agreement, BUiD and CDA will work together to design and deliver specialised education and training programmes, support professional licensing pathways, and promote research and knowledge exchange in the social sector. The collaboration will also create opportunities for student engagement, field training, and capacity building, helping prepare highly qualified professionals to meet the community's evolving needs. The MoU reinforces BUiD's role as a key contributor to social development in the UAE and highlights the importance of partnerships between academia and government in creating sustainable social impact.

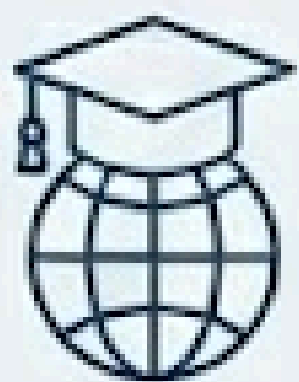
200 DOCTORAL GRADUATES

The British University in Dubai (BUiD) proudly celebrates a significant milestone with the graduation of more than 200 doctoral graduates from its Doctorate in Education (EdD) programme. As the first university in the UAE to offer a doctorate in education, BUiD has played a pioneering role in developing educational leaders, researchers, and policymakers who are making a lasting impact across the UAE and beyond.



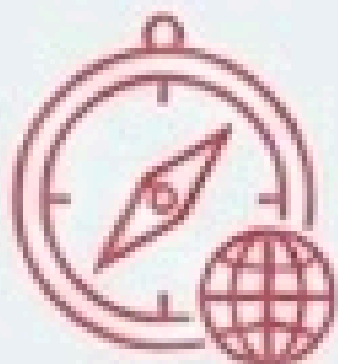
This achievement reflects the University's longstanding commitment to research excellence, innovation, and the advancement of educational practice, while reinforcing its position as one of the region's leading institutions for higher education and educational research.

BUID AT A GLANCE



**MASTER
GRADUATES**
2274 Master Graduates

01.



**RESEARCH
PROJECTS**
187 Research Projects

02.



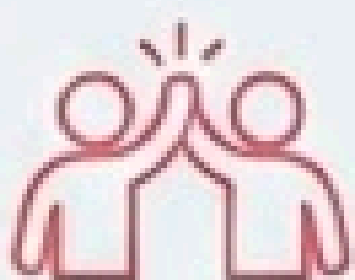
**SCHOLARLY
PUBLICATIONS**
1803 Scholarly Publications

03.



NATIONALITIES
82 Nationalities

04.



**PhD
GRADUATES**
417 Graduates

05.

ACCREDITATION & PROFESSIONAL RECOGNITION

Institutional Accreditation

Institutional Quality Accreditation (IQA)

The QAA has updated the accreditation title from International Quality Review (IQR) to International Quality Accreditation (IQA).



Professional Accreditation & Memberships

 **Chartered Institute of Building (CIOB)**
MSc SDBE, MSc CLDR

 **Chartered Institute of Arbitrators (CIARB)**
MSc CLDR

 **American Society for Engineering Management**
MSc Engineering Management

 **Chartered Management Institute**

 **Project Management Institute - GAC**
MSc Project Management

 **Global Association of Risk Professionals**
MSc Financial Risk Management

 **Institute of Chartered Accountants in England and Wales (ICAEW)**
MSc Financial Risk Management

 **Association to Advance Collegiate Schools of Business (AACSB)**
(Member)

"Our accreditations reflect our commitment to global academic excellence and professional relevance."

MSc Project Management

**Graduate with a single award
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the University of Leeds.**

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