CLASS OF 2024 PROGRAM

https://mbzuai.ac.ae/the-node/commencement-2024/

mbzuai.ac.ae

UAE NATIONAL ANTHEM

ISHY BILADI

LIVE MY COUNTRY, THE UNITY OF OUR EMIRATES LIVES
YOU HAVE LIVED FOR A NATION
WHOSE RELIGION IS ISLAM AND GUIDE IS QURAN
I MADE YOU STRONGER IN GOD'S NAME OH HOMELAND
MY COUNTRY, MY COUNTRY, MY COUNTRY, MY COUNTRY
GOD HAS PROTECTED YOU FROM THE EVILS OF THE TIME
WE HAVE SWORN TO BUILD AND WORK
WORK SINCERELY, WORK SINCERELY
AS LONG AS WE LIVE, WE WILL BE SINCERE, SINCERE
THE SAFETY HAS LASTED AND THE FLAG HAS LIVED OH OUR EMIRATES
THE SYMBOL OF ARABISM
WE ALL SACRIFICE FOR YOU, WE SUPPLY YOU WITH OUR BLOOD
WE SACRIFICE FOR YOU WE SUPPLY YOU WITH OUR BLOOD
WE SACRIFICE YOU WITH OUR SOULS OH HOMELAND

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CHAIRMAN'S MESSAGE

Congratulations to the talented MBZUAI Class of 2024!

Thanks to the visionary leadership of His Highness Sheikh Mohamed bin Zayed Al Nahyan, the UAE is rapidly becoming a global leader in AI. At the inception of our university, His Highness emphasized a vision that resonates with the UAE's pioneering spirit, paving the way towards a new era of innovation and technological advancement that benefits not only the UAE but the entire world.

AI stands as the paramount driver of success and the most influential technology shaping our future. Your graduation today marks a significant milestone as MBZUAI ascends from a fledgling academic and research institution to a top 20 AI research institution globally, a testament to your dedication and contributions.

As you embark on your next journey, drawing upon the knowledge and experiences gained here, remember your role in shaping the future of AI leadership. Your intellect, coupled with the robust research environment and collaborations with industry leaders, positions you to tackle the world's most pressing challenges and seize opportunities for positive change.

Today, amidst celebration, we commend upon you the status of alumni and ambassadors of MBZUAI's bold promise. We urge you to remain steadfast in your commitment to AI as a catalyst for progress and goodness, driving solutions that resonate within the UAE and beyond.

We are immensely proud of you, and we trust that you will continue to embody the spirit of innovation and excellence that defines MBZUAI. Congratulations once again, Class of 2024.

Dr. Sultan Ahmed Al Jaber
Minister of Industry and Advanced Technology
COP28 UAE President
Group MD & CEO of ADNOC
Chairman of Masdar
Founding Chair of the MBZUAI Board of Trustees

PRESIDENT'S MESSAGE

Dear Class of 2024 graduates,

When MBZUAI was founded 5 years ago in 2019, it laid down a marker to the world, that the disciplinary of artificial intelligence must grow out of its initial boundary within computer science and become a new universal foundation of learning and innovation. It demonstrated the vision to move beyond a resource -driven economy to a knowledge-driven one – with AI as the driving force.

You are graduating at an important in history where a new form of technology is reshaping many aspects of society and even civilization — and this technology is AI. Many great inventions of the past – the microscope, electricity, the internet – helped to achieve results better than human capacity, or at a scale greater than human collective means. On the other hand, AI can transcend human's capacity and transform it to even greater. Like the Age of Enlightenment following the invention of the printing press, AI goes beyond doing things better, faster, and bigger. It will bring our society to the Age of Empowerment, leveling the playing field for people from all backgrounds and reshaping how people think, work, and self-actualize.

As our new graduating class, you are part of that potential and I want to express my admiration for what you have achieved in your time here. You represent MBZUAI at its best: audacious, inquisitive, and rigorous. And as you embark on the next stage of your journey, stay curious – continue to learn, to explore and to understand the world.

Most of all, I ask that you think deeply about how you will use the potential of AI to make a difference in the world. From drug design to climate modeling and energy control, there are many applications where human intelligence and capability are not sufficient to deal with the complexity, but AI offers the ability to create entirely new solutions and services.

As MBZUAI graduates, you are comfortable challenging existing norms. However, society at large is much less comfortable doing so – technological advancements are often polarizing in nature because they disrupt these accepted norms.

This is particularly true of AI, and this is where you have a crucial role to play in the years to come. As AI reshapes our lives and the world that we live in at an increasingly rapid pace, I ask you to listen to people's understandable concerns, but also educate them. AI does not generate knowledge, people do – and the competitive advantage is the human intelligence behind it.

But we also have another role – to serve humanity through the pursuit of research excellence. As scientists and engineers, we are naturally curious – trained to search for answers, reframe problems and discover – and that shouldn't be discouraged. So, never stop exploring and go forward with courage, humility, compassion, honor and perseverance.

Take this opportunity – and, once again, I wish you success and boundless inspiration.

Professor Eric Xing
MBZUAI President and University Professor

MBZUAI CLASS OF 2024: KEY FACTS

101 students

33% female students

67% male students

1st Ph.D. cohort from MBZUAI

3 Ph.D. graduates

ML all in machine learning

98 M.Sc. graduates

58 ML graduates in machine learning

12 NLP graduates in natural language processing

28 CV graduates in computer vision

98 internships completed by the master's cohort

- ADNOC
- Abu Dhabi Ports
- Etihad Airways
- Cleveland Clinic
- Statistics Center Abu Dhabi (SCAD)
- Insilico Medicine

Celebrating our largest Emirati presence

The MBZUAI Class of 2024 includes the university's **largest Emirati presence** with 24 graduates including an incredible **15 female AI changemakers**; equipping a new generation of UAE nationals with the skills and abilities to lead in a world shaped by AI.

22 nationalities

24% Emirati students (the largest single nationality)

After the UAE, the top represented countries are **China, India, Egypt, and Pakistan**

80 unique scholarly papers published at conferences including:

- International Conference on Medical Image Computing and Computer Assisted Intervention **(MICCAI)**
- Neural Information Processing Systems **(NeurIPS)** 2022 and 2023
- Empirical Methods in Natural Language Processing **(EMNLP)** 2023
- International Conference on Learning Representations **(ICLR)** 2023 and 2024
- European Chapter of the Association for Computational Linguistics **(EACL)** 2023

Global achievements in AI

The Class of 2024 represented MBZUAI in top international hackathons and conferences including claiming the **highest honors at the Arabic Natural Language Processing Conference** (Best Paper Award), International Conference on Medical Image Computing and Computer Assisted Intervention **(MICCAI)**, won **HEKTOR 2021** (Head and Neck Tumor segmentation and outcome prediction in PET/CT images), **BioInformatics Hackathon** by Insilico Medicine (first place), and **Bespin Global Hackathon 2023 (first place)**.

VALEDICTORIAN

DEVELOPING DEEP LEARNING MODELS TO DIAGNOSE TUMORS

Potentially lifesaving technology could help early treatment of cancer

Numan Saeed, Mohamed bin Zayed University of Artificial Intelligence's (MBZUAI) first Ph.D. graduate and Class of 2024 valedictorian, has long been fascinated by artificial intelligence.

Having taken a course by machine learning pioneer Andrew Ng back in 2011, he gained an early insight into the potential of AI to do good.

"The application-based nature of AI, as demonstrated in projects during the course, captured my interest," Saeed explained. "The diverse applications of AI intrigued me and influenced my academic and professional outlook, especially when I worked in sectors such as aviation and manufacturing, applying AI models."

It was inevitable that Saeed's desire to make an impact with AI would lead him to do a Ph.D. With a background in electrical engineering and experience in industry, Saeed wanted to take a deep dive into machine learning, and MBZUAI was his obvious destination.

"My decision to join MBZUAI was clear because it stands as the sole institute dedicated to AI," he said. "Despite being a new institution, it was evident that it had an experienced faculty with a strong publication record and field experience."

Saeed started his Ph.D. course in 2021 and joined MBZUAI's cross-disciplinary BioMedIA group, a dedicated AI healthcare research group that consisted of about 20 master's students when he joined, and grew to 30 students under the guidance of Dr. Mohammad Yaqub, associate professor of computer vision at MBZUAI.

Saeed's interest in AI healthcare led him to choose head and neck cancers, the seventh most common form of cancer globally, as his main research area. He was keen to conduct valuable research in this area due to the chronic demand for better services and solutions for people suffering from these cancers, which affected around 1.1 million people in 2021.

Early diagnosis and effective treatment can reduce mortality rates by up to 70%, which makes any process or technology that can significantly improve diagnosis and prognosis a potential lifesaver.

“My decision to research head and neck cancers stemmed from their unique challenges,” Saeed said. “These cancers can appear in various locations within the head and neck, posing difficulties in early detection due to differing symptoms. The challenges lie not only in the detection process but also in accurately pinpointing the location, which our AI models aim to address.

“Given the high treatment costs and limited resources in some countries, leveraging AI models to enhance the diagnosis and prognosis of cancer patients could significantly alleviate the burden on healthcare systems, in addition to helping the individual people being diagnosed.”

Saeed’s research investigated how deep learning models can be used to diagnose tumors and predict the survival rate of patients diagnosed with specific forms of cancer.

He developed a multi-modal AI model capable of interpreting PET and CT scan imagery – a computer vision challenge – and assessed these in combination with the correct interpretation of the associated doctor’s notes, which falls within the field of natural language processing (NLP). To arrive at a diagnosis and a prognosis, the AI model had to consider variables including the patient’s age, gender, weight, the size of the tumor, prior treatment, and whether or not they drink alcohol or smoke.

“To make this kind of diagnosis and prognosis possible, you have to make sure that it is generalizable, and to do that, you have to focus on making evaluation processes stricter and more robust during the training stages,” Saeed said.

To train the AI system to detect cancers in scans, Saeed utilized a dataset from seven centers, mainly in Europe and Canada, comprising around 700 patients.

Training challenges included difficulties in detecting metastasis, especially in later stages, as small cancerous lymph nodes away from the primary tumor sometimes went unnoticed. Additionally, the dataset’s limited size posed challenges in training the model to accurately identify specific scenarios, emphasizing the importance of data diversity and size in refining AI models.

The research was the basis of Saeed’s Ph.D. dissertation, entitled ‘Deep Learning for Cancer Diagnosis and Prognosis’.

Saeed believes the impact of the technology could be particularly profound in countries such as India where oncological services are limited and there is a shortage of specialist clinicians, especially in rural areas where more than two-thirds of the country’s 1.43 billion people live.

Having been immersed in this research for three years, Saeed is currently working as a postdoctoral graduate on ongoing aspects of the research.

“I aim to publish further before transitioning to industry,” he said. “I’m particularly interested in AI applications with real-world impacts. Abu Dhabi’s active AI scene and companies, and the university’s collaborations with entities such as Cleveland Clinic Abu Dhabi, make it an appealing place to stay and contribute to the field.”

In addition to completing his Ph.D. in just three years, Saeed also completed five papers where he was the lead researcher and contributed to five more. He also won an international competition – HEKTOR 2021 (Head and Neck Tumor segmentation and outcome prediction in PET/CT images) – which was launched at the prestigious International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI).

During his research, while looking at the challenge of accessing sufficient patient data for training without compromising privacy, Saeed became interested in an AI-based technique known as federated learning, which enables the analysis of patient data in-situ without it ever leaving a hospital. Pursuing the use of federated learning for diagnosis is the next stage of his research.

In terms of his experience at MBZUAI, Saeed said that he was impressed by the resources and faculty, the supportive environment, and the social life. “The diversity of the students was great and contributed to a well-rounded experience. In terms of facilities, the labs and registration processes are fantastic,” he said.

Saeed, who likes to spend his spare time with his wife and two-year old son, said that he also appreciates life in Abu Dhabi. “It’s a great place to live,” he said. “I love the cultural diversity, the safety and the ease of getting around.”

MACHINE LEARNING

DRIVING TOWARDS INNOVATION

MBZUAI graduate takes a visionary approach to traffic sign detection and recognition

Transportation expert Fatima Ahmed Khalil Mohamed Alkhoori had already clocked up an impressive level of experience when she applied to join Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) to study for a master's degree in machine learning back in 2022.

With a bachelor's degree in transport engineering from the Higher Colleges of Technology, and a master's degree in sustainable critical infrastructure from Khalifa University – not to mention a promising career as an R&D expert at Etihad Rail – Alkhoori had a firm understanding of what she wanted to achieve by studying machine learning.

"I have always had a passion for transportation," she said. "It's considered a key branch of civil engineering, and it touches upon so many areas including planning, design, operations, and management. It also influences the economy, business, and our daily lives in so many ways. That's why I feel it's my mission to contribute to making the UAE's transport system the best in the world."

During her time at Etihad Rail, Alkhoori came to appreciate the potential impact of AI on train networks and the wider transport sector. "I developed a proposal about using AI to strengthen the predictive maintenance regimes for assets including the locomotives and wagons," she said. "I started to consider other ways that AI could be used to improve transport and make it work more efficiently."

This interest in AI, and recognition of its importance to the future of transport, led

Alkhoori to return to university to earn her second M.Sc. “I decided to pursue a master’s degree in machine learning at MBZUAI because I felt my other degrees and experience gave me a unique opportunity to conduct transportation-focused research aimed at transforming raw information into actionable insights within the sector,” she said.

Alkhoori focused her research on the use of machine learning to recognize traffic signs using transformer model architectures. It is an area that is vital to the safe development and integration of autonomous and self-driving vehicles, which need to be able to identify and interpret signs in real time to ensure that their navigation is safe and effective.

However, the challenge is complex. There are many variables that make it difficult for machines to see and comprehend traffic signs properly, including the viewing angle, variations in lighting and reflection, shadows, and proximity to other signs.

“The objective of my research was to investigate the different variants of vision transformers and develop a suitable methodology to enhance their ability to recognize signs correctly by eliminating variables,” Alkhoori said.

The research used transformer model architecture to increase the overall accuracy with which autonomous vehicles recognize traffic signs – regardless of the surroundings and environmental conditions, which can easily confuse regular models.

Alkhoori used a data set of 1,150 traffic signs provided by the Abu Dhabi’s Integrated Transport Center, and a German data set containing 50,000 images that is publicly available in a global open-source machine learning data library. Together, the data sets helped teach the algorithm to extract the most relevant data.

“I’m proud of the fact that this is the first comprehensive study of its type that utilizes UAE data,” Alkhoori said. “We believe we’ve achieved very good accuracy in comparison to other journals and publications that have conducted similar research, and we have found ways to improve the accuracy of recognition.”

Alkhoori expressed her gratitude to the UAE’s leaders for creating so many opportunities for learning and development, including MBZUAI.

“I want to extend my sincere thanks and gratitude to my country and our wise leadership for providing this opportunity to learn and research AI and machine learning,” she said. “I aim to pay back this trust by using the power of machine learning to solve key transport and infrastructure challenges.”

Alkhoori has been accepted to pursue her Ph.D. studies and would like to continue with her current research journey, not least because she sees a significant value in building capabilities that can improve any area of the transport sector.

“The UAE has developed world-class infrastructure in a relatively short time, and I want to play a part in creating some of the next-generation technology that will help take transport to the next level,” she said.

Doctor of Philosophy in Machine Learning

Hilal Mohammad Hilal AlQuabe'h - Jordan
William de Bronac de Vazelhes - France
Numan Saeed - Pakistan

Master of Science in Machine Learning

Maryam Khalifa Al-Ali - United Arab Emirates
Mohammed Talha Alam - India
Ahmed Mohamed Albreiki - United Arab Emirates
Rzan Raed Alhaddad - United Arab Emirates
Amna Abdelrahim Alhosani - United Arab Emirates
Jamal Khaled Aljaberi - United Arab Emirates
Abdalla Hassan Aljasmi - United Arab Emirates
Fatima Ahmed Alkhoori - United Arab Emirates
Ahmed Rashed Almansoori - United Arab Emirates
Hamza Khamis Alobeidli - United Arab Emirates
Baketah Khalid Alrashdi - United Arab Emirates
Salma Saeed Alrashdi - United Arab Emirates
Ahmed Sultan Alwheibi - United Arab Emirates
Mohamed Adel Alzarooni - United Arab Emirates
Mohammed El-Amine Azz - Morocco
Kaleab Belay - Ethiopia
Rohit Bharadwaj - India

Master of Science in
Machine Learning

Mario Cantero - Mexico
Yixuan Chen - China
Sharon Chokuwa - Zimbabwe
Yulang Fei - China
Mohammad Hanan Gani - India
Junyi Guan - China
Mehaboobathunnisa Sahul Hameed - India
Ahmad Abdul Majed - Jordan
Anees Ur Rehman Hashmi - Pakistan
Noor Hazim Hussein - Jordan
Huzaifa Muhammad - Pakistan
Adham Ibrahim Abdelhady - Egypt
Mohamed Fazli Imam - Sri Lanka
Raza Baqir Imam - India
Songyao Jin - China
Amrin Kareem - India
Xiangrui Ke - China
Bhuvnesh Kumar - India
Xun Li - China

Congratulations graduates

Master of Science in
Machine Learning

Rufael Marew - Ethiopia
Hour Eisa Mohamed - United Arab Emirates
Nurdaulet Mukhituly - Kazakhstan
Akhmed Sakip - Kazakhstan
Mohammad Amaan - India
Youssef Hamed Sharaf - United Arab Emirates
Yifan Shen - China
Hawau Olamide Toyin - Nigeria
Yanlin Wu - China
Chulu Xiang - China
Maryam Mohamed Alghfeli - United Arab Emirates
Farah Husain Alharthi - United Arab Emirates
Aamena Mohamed Alshehyari - United Arab Emirates
Majed Zakareya Alsuwaidi - United Arab Emirates
Haifa Mohammed Altlili - United Arab Emirates
Sana Siddiq Kurungadan - India
Liang Li - China
Yunxiang Li - China
Ruslan Mikhailov - Russia
Xingyu Qu - China
Ridwan Bello Salahuddeen - Nigeria
Zeyuan Yin - China

MBZUAI
empowering graduates with the transformative capabilities of **machine learning**, paving the way for future **innovation and success**

NATURAL LANGUAGE PROCESSING

NLP STUDENT'S RESEARCH TACKLES MEDIA BIAS

Tool could help prevent the spread of misinformation

Alarmed by the rise of fake and misleading news on social media, Zain Muhammad Mujahid seized the opportunity to tackle the problem as part of his M.Sc.

"Fake news is a ubiquitous problem now and has a toxic effect on society," said Mujahid, who is graduating from Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) with a master's degree in natural language processing (NLP).

"A lot of people believe anything they read on social media and have their opinions swayed by content that is either false or heavily biased and manipulative. It has a corrosive effect on people and society, so I was excited to work with professors who are leaders on the subject."

Joining MBZUAI in 2022, Mujahid has been tutored and supervised by one of the world's foremost experts on fake news: Professor Preslav Nakov, department chair and professor of NLP.

Focusing his research on bias demonstrated by individual media outlets, rather than trying to monitor individual stories, Mujahid explained he is profiling news media bias using LLMs.

"Each news outlet exhibits bias on various topics, like political affiliations or stances on social issues," he said. "Leveraging 16 identifiers, I utilized pre-existing knowledge from LLMs like ChatGPT to predict media bias from media outlets directly, making it more efficient than traditional methods, such as manually collecting and analyzing thousands of articles. The support of existing language models streamlined the process."

Mujahid aims to develop a practical application capable of alerting people to heavily biased and potentially fake news — initially focusing on

"I'd like to continue finding solutions to the problem of fake and misleading content. MBZUAI has provided me with the ideal foundations to build upon my research."

ZAIN MUHAMMAD MUJAHID
M.Sc. in Natural Language Processing

bias detection, but ultimately predicting the factuality of new media. “Imagine a product where you input a media URL, and it instantly provides a comprehensive profile, highlighting biases,” he said. “This tool could be invaluable for journalists and platforms to filter content based on its reliability, helping prevent the spread of misinformation.”

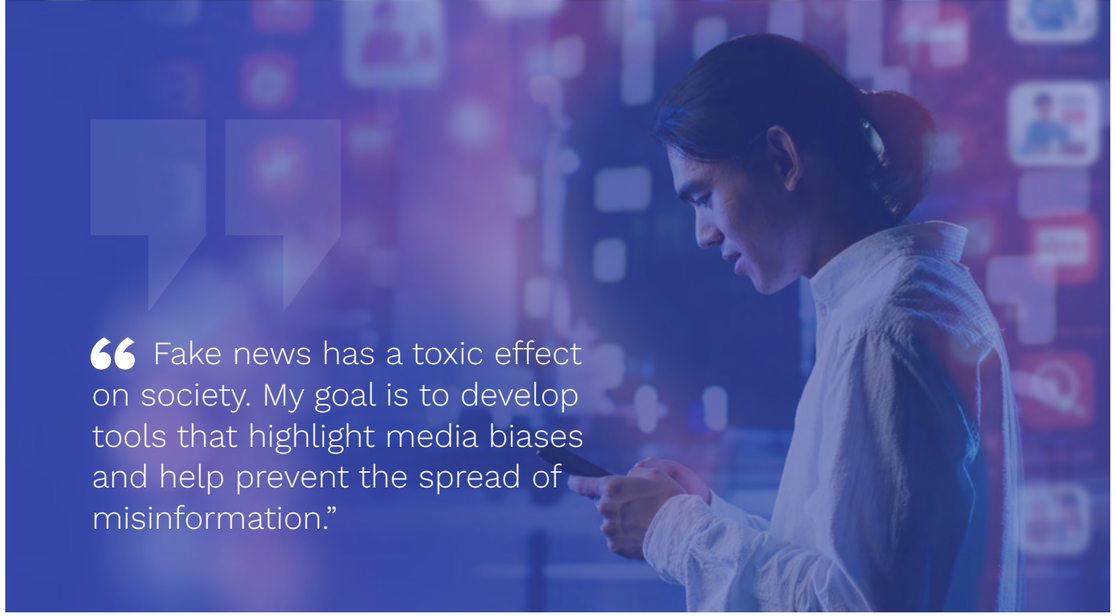
The research is currently geared towards English-language media, but collaborative projects with other teams are exploring a multi-language approach, covering languages such as Arabic, German, Hindi, French, Spanish, Japanese, Italian and Russian. This will help create a framework that can be adapted to different languages and cultural perspectives, enabling cross-knowledge transfer models that will enhance the accuracy of fake news detection.

Mujahid also said that he and his peers plan to incorporate elements including images and video from news articles to increase the ability of their algorithms to detect and flag media bias.

A key reason that Mujahid has been able to deep dive into complex research is the quality of teaching at MBZUAI, enhanced by the student-faculty ratio of 4:1.

“This helps with effective knowledge transfer, and I appreciated the personalized attention,” he said. “All the supervisors are easily accessible. It’s a unique advantage having everyone in one place.”

Mujahid was also impressed with the opportunities that he had to engage in various projects at the university. He contributed to the development of Jais,



the world’s biggest and most accurate Arabic LLM, and was also part of the student team that represented MBZUAI at COP28.

In addition, Mujahid mentored two student NLP teams at UGRIP – a student internship program that saw 34 of the world’s most promising STEM undergraduate students visit the Abu Dhabi campus for a one-month research internship in July 2023. One of the NLP projects led to a paper being accepted at the European Chapter of the Association for Computational Linguistics in 2024.

Away from research, Mujahid appreciated the rich social life and recreational facilities at MBZUAI that helped him find a healthy work-life balance. “With students from over 40 nationalities, making friends is easy and there are opportunities to engage outside of the lab. I’m a regular visitor to the gym and enjoy cycling with friends at Abu Dhabi F1 circuit.”

He also made good use of the UAE’s location to travel to numerous countries, including Azerbaijan and Saudi Arabia, where he visited Medina and Mecca.

Looking ahead, Mujahid plans to continue in the research field and secure a Ph.D. position, either at MBZUAI or a North American university.

“I’d like to continue finding solutions to the problem of fake and misleading content,” he said. “MBZUAI has provided me with the ideal foundations to build upon my research.”

Congratulations graduates

Master of Science in
Natural Language Processing

Ahmed Hesham Aboeitta - Egypt
Osama Mohammed Afzal - Pakistan
Aisha Fahad Alraeesi - United Arab Emirates
Amirbek Djanibekov - Uzbekistan
Doan Duy Khai - Vietnam
Yichen Huang - China
Qisheng Liao - China
Jonibek Mansurov - Uzbekistan
Zain Muhammad Mujahid - Pakistan
Sathyamoorthy Rajendran - India
Sara Shatnawi - Jordan
Youssef Mohamed Nafea - Egypt

MBZUAI graduates' work includes inter-language translation, semantic understanding, text summarization, and dialog systems

COMPUTER VISION

BREATHING NEW LIFE INTO MEDICAL APPLICATIONS

How one student is using computer vision to transform lung health assessment

Having seen the potential of computer vision to positively impact people's lives, Ahmed Ibrahim Sharshar was determined to make a difference through his research.

"I wanted to do something that is useful for people," said the Egyptian graduate who recently completed a master's degree in computer vision at Mohamed bin Zayed University of Artificial Intelligence (MBZUAI).

"I chose to focus on health and medical technology, especially with medical applications, as these could potentially improve so many lives. I wanted to create models that could work for people in developed countries who don't have access to GPUs and the like, so that they could benefit from the technology we have.

"This is one of the reasons I applied to MBZUAI, and chose to work with Professor Mohsen Guizani and Professor Mohammad Yaqub as my supervisors, to have their experience in making models that are lightweight and can work on devices."

For his thesis, entitled "RespiroDynamics Unveiled: A Groundbreaking Multi-Modal Deep Learning and Spiking Neural Network Framework for Revolutionizing Non-Invasive Lung Health Assessment", Sharshar looked specifically at lung health and built an application that can assess your lung health without the need of the usual medical devices required to do so.

"You upload a video of yourself forcibly breathing, and our model gives three main estimations to assess how much air is in your lungs, if there are any obstacles, and if you have any problems," he said.

The three metrics are Forced Vital Capacity (FVC), Forced Expiratory Volume in 1 second (FEV1), and Peak Expiratory Flow (PEF).

"I focused on health and medical technology to improve lives, creating models for those without access to advanced hardware."

AHMED IBRAHIM SHARSHAR
M.Sc. in Computer vision

Using more than 2,000 samples from 60 participants, with various data types, including red-green-blue (RGB) and thermal videos, heart rate (HR), ECG readings and metadata, Sharshar’s evaluations proved to be incredibly accurate. For FVC and FEV1 he recorded 99.7% accuracy for the RGB model and 100% for the thermal model. While PEF saw accuracies of 97.14% for RGB and 96% for thermal.

And while he is grateful for the technical skills that the university helped him develop, Sharshar said it was the ‘ideas’ facet of computer vision that spurred on his research.

“The courses I took — especially in computer vision — helped me to not just code, but to get the ideas, to innovate, to define the problem and how to solve it. They gave me greater knowledge in state-of-the-art developments, and to me that was more important than the coding. This is how we can make things useful for people while also being affordable, and this is why I chose this domain for my research.”

The next step, explained Sharshar, is to improve on his existing model by collecting more data, make the model even lighter, and work on getting more accurate estimations with these lighter models.

“I also want to focus on other medical applications, building lightweight models that can work on devices and include things such as MRIs, brain health, and so on. I have applied to do my Ph.D. here and have been accepted thankfully. I will continue with my same professors because I want to continue on this trend, and because I feel so comfortable with my research and my life here.”

Sharshar, who has published or co-published more than 10 papers, admits that the quality of the faculty was one of the key reasons he applied to MBZUAI, and praised their ability to drive students onwards without burning them out.

“The requirements here are high, but the supervisors know how to manage that, and they know how to keep you moving forward. I had offers from Canada, Europe and other Arab countries, but this is definitely the place I want to be.”

Thinking long-term, Sharshar said that he would like to pursue a future in both academia and industry, doing both in parallel to achieve greater impact.

“I want the opportunity to continue learning while teaching others, and also have my own start-up that can provide great results and serve the community. I would love for my research to have practical applications and be useful for people, whether that’s through medical applications or something else. If I can do these two things at the same time, that would be perfect.”

Congratulations graduates

Master of Science in
Computer Vision

Jameel Hassan Abdul Samadh - Sri Lanka
Shamma Sultan Alsaedi - United Arab Emirates
Mothilal Asokan - India
Nouf Ali Alshamsi - United Arab Emirates
Aliyu Bagudu - Nigeria
Joseph Geo Benjamin - India
Leena Ali Bin Kuwair - United Arab Emirates
Mohamed El Amine Boudjoghra - Algeria
Cong Cao - China
Hosam Mahmoud Elgendy - Egypt
Ibraheem Mufeed Hamdi - Canada
Ho Thanh Cong - Vietnam
Zhenhui Lin - China
Kane Lindsay - United Kingdom
Fadillah Adamsyah Maani - Indonesia

Master of Science in **Computer Vision**

Dana Osama Mohamed - Egypt
Mohammad Areeb Qazi - India
Nada Saadi - Morocco
Santosh Sanjeev - India
Baliah Sanoojan - Sri Lanka
Ahmed Ibrahim Sharshar - Egypt
Chong Tian - China
Hanlue Zhang - China
Salwa Khaled AlKhatib - Lebanon
Imane Hilal - Morocco
Xiangjian Hou - China
Aleksandr Matsun - Russia
Yufei Zhang - China

In the field of **computer vision**, **graduates** from **MBZUAI** are **embarking** on a **visual odyssey** to **decode** the **future**

OUR HISTORY

Mohamed bin Zayed University of Artificial Intelligence began in 2019 with the announcement of the UAE's establishment of the world's first AI university to be named after His Highness Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE and Ruler of Abu Dhabi.

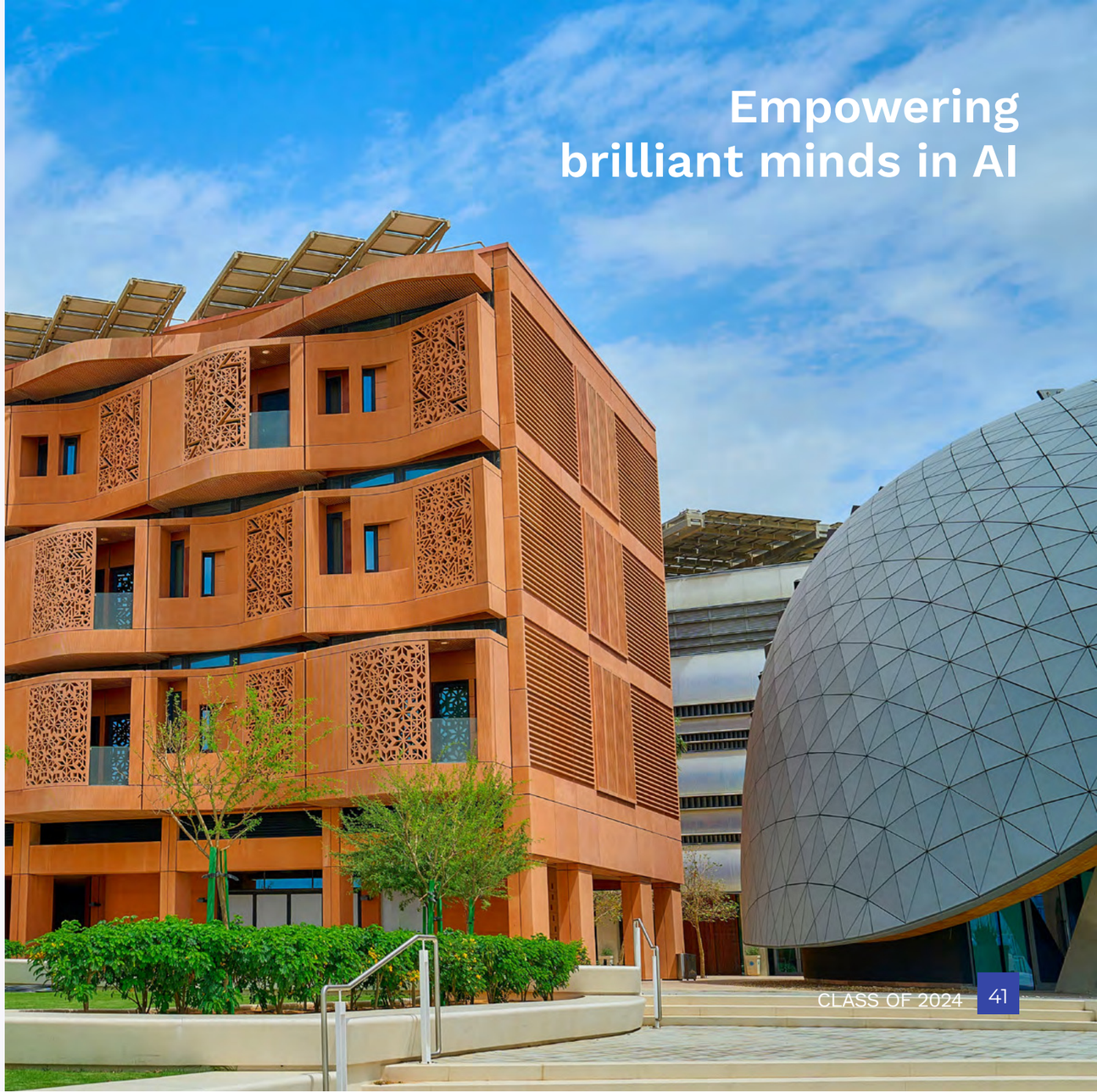
An open invitation from the UAE to the world to harness the potential of artificial intelligence, MBZUAI welcomed its first cohort of students in January 2021. Today, the third graduating class of 2024 represents the power and promise of that invitation.

A purpose-built institution to lead the world in AI, MBZUAI is building a legacy of transformative research conducted by some of the best minds in computer science. The university is ranked 18th globally in AI, computer vision (CV), machine learning (ML), and natural language processing (NLP).

Anchored in Abu Dhabi, a hub of high-tech innovation, MBZUAI is helping to position the UAE as a world leader in AI while contributing positively to growth within and across the sector. We leverage the power of AI through partnerships with institutions such as IBM, Malaria No More, Infinite Brain Technologies (IBT), Quris-AI, and GE Healthcare.

MBZUAI's 270-plus students come from more than 40 countries and one third are women. With a student-faculty ratio of 4:1, master's and doctoral students work alongside world-class faculty with real-world experience in AI and contribute to creating a robust AI ecosystem through partnership and collaboration with industry and research institutes. Some 65 faculty members have been appointed to date; the majority of whom come to Abu Dhabi from the world's top 100 AI institutions.

Last year saw the MBZUAI reach a special milestone, as it awarded its first Ph.D. to machine learning student Numan Saeed. Completing his Ph.D. in just three years rather than the usual four or five, Saeed's research explores how deep learning models can assist in the treatment of head and neck cancers. A further two Ph.D.s have been awarded since, to Hilal Mohammad Hilal AlQUabe'h and William de Bronac de Vazelhes, both of the machine learning department.



CLICK HERE TO WATCH
THE STORY OF THE GOWNS

STORY OF THE GOWNS

The graduation gown.
It is the start of a tradition.
It carries a sense of place and belonging.
The gown is resplendent gold and blue,
hand stitched to evoke Abu Dhabi's sea and sand.
Gold is an echo of the hues of the desert,
it is also evocative of wisdom and enlightenment.
Blue is from the velvety sea, rich with life,
teeming with possibility.
It also donates bold vision and leadership.
Our graduation gown is completed by a hood,
reminiscent of the Emirati bisht.
The lining holds the pattern of the UAE's national flower.
Truly, the gown is a tribute to local culture,
national aspirations, and a thirst for knowledge.

Watch The Story of the Gowns

THE UNIVERSITY MOTTO

POWER FROM KNOWLEDGE TO SERVE

This captures the university spirit. It's a principle to guide all of us. It reminds us that through knowledge we have the power, the ability, to service and help others.

Master of Ceremonies (MC)

Abdullah al Qassab

Procession

Flag bearers

Ibrahim Ali Mohammed
M.Sc. student

Fathinah Asma Izzati,
M.Sc. student

Mace bearer

Aamna Al Mansoori,
Director of HR and Faculty Affairs

SPEAKERS

Dr. Sultan Ahmed Al Jaber
Minister of Industry and Advanced Technology
COP28 UAE President
Group MD & CEO of ADNOC
Chairman of Masdar
Founding Chair of the MBZUAI Board of Trustees

H.E. Dr. Sultan Ahmed Al Jaber is a member of the UAE Federal Cabinet, Minister of Industry and Advanced Technology, and the COP28 UAE President, and Founding Chairman of the MBZUAI Board of Trustees. In his role as Minister of Industry and Advanced Technology, Dr. Al Jaber oversees efforts to further expand the industrial development of the UAE, and in particular promote in country value, leveraging technology as a key enabler, as we enter the Fourth Industrial Age.

In November 2023, he was appointed COP28 UAE President, where he led the efforts to achieve consensus among almost 200 countries to achieve a landmark response to the Global Stock Take, named 'The UAE Consensus'. The historic agreement delivered a package of ambitious and balanced outcomes across the entire climate agenda.

Prior to assuming the COP28 Presidency, Dr Al Jaber has been UAE Special Envoy for Climate since November 2020 and previously served in the role from 2010 to 2016. He has over 25 years' experience across the energy spectrum and has played a leading role in the UAE's energy diversification. In 2016, Dr. Al Jaber was appointed CEO of ADNOC with a mandate to transform, decarbonize and future-proof the company. At the direction of the UAE Leadership, he has led a rapid and comprehensive transformation through increased efficiencies, a comprehensive decarbonization program, strengthened financial performance, and an enhanced long-term sustainability strategy.

Eric Xing
MBZUAI President and University Professor

Professor Eric P. Xing is the president of the Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), a professor of computer science at Carnegie Mellon University, and Founder of Petuum Inc., a 2018 World Economic Forum Technology Pioneer company that builds standardized artificial intelligence platform and operating system for industrial applications. He completed his undergraduate study at Tsinghua University, and holds a Ph.D. in Molecular Biology and Biochemistry from Rutgers University, and a Ph.D. in Computer Science from the University of California, Berkeley.

His main research interests are the development of machine learning and statistical methodology, and large-scale computational systems and architectures, for solving problems involving automated learning, reasoning, and decision-making in artificial, biological, and social systems.

Xing has served on the editorial boards of leading scientific journals including the Journal of the American Statistical Association, Annals of Applied Statistics, PLOS Journal of Computational Biology, IEEE Journal of Pattern Analysis and Machine Intelligence, Machine Learning Journal, and the Journal of Machine Learning Research. He was a member of the United States Department of Defense Advanced Research Projects Agency (DARPA) Information Science and Technology (ISAT) advisory group, and was elected as Fellow of the Association of Advancement of Artificial Intelligence (AAAI), Association for Computing Machinery (ACM), American Statistical Association (ASA), Institute of Electrical and Electronics Engineers (IEEE), and Institute of Mathematical Statistics (IMS).

He is a recipient of the National Science Foundation Career Award, the Alfred P. Sloan Fellowship, the United States Air Force Office of Scientific Research Young Investigator Award, the IBM Open Collaborative Research Faculty Award, and the Carnegie Science Award.

VALEDICTORIAN

Numan Saeed became the first ever MBZUAI student to be awarded a Ph.D. His dissertation Deep Learning for Cancer Diagnosis and Prognosis explores how deep learning models can assist in the treatment of cancers of the head and neck – the seventh most common form of cancer globally.

The machine learning student conducted his research under the supervision of Dr. Mohammad Yaqub, associate professor of computer vision at MBZUAI, and did so while completing five papers where he was the lead researcher, and contributing to five more.

Saeed also won an international competition, HEKTOR 2021, which was launched by the prestigious International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI).

Numan Saeed
Valedictorian
"Deep Learning for Cancer Diagnosis and Prognosis"

Sultan Al Hajji
Vice President of Public Affairs and Alumni Relations

ALUMNI WELCOME

Dear graduates,

Congratulations on your graduation and welcome to the MBZUAI alumni community, where you join a community of trailblazers and innovators who are shaping the future of technology.

As you embark on your career, or continue your academic career, you are stepping into a world in need of your unique knowledge and skills. We are excited about all that is professionally ahead of you in the UAE or globally and will take great pride in celebrating your successes.

The Class of 2024 represents a cohort of alumni driven by intellectual curiosity, ready to venture into an entrepreneurial ecosystem that has the power to reshape our everyday lives. Your journey with MBZUAI positions you as a source of inspiration for future generations of students and fellow alumni, who may look to you as a guide and role model.

We encourage you to remain connected with the University and your fellow alumni through the MBZUAI Alumni program. This network, led by the MBZUAI Alumni Advisory Board, offers you opportunities to stay connected through exclusive, unique-to-MBZUAI events, and stay updated with the latest insights in AI, entrepreneurship and innovation. Whether you choose to become an advisor, ambassador, or volunteer leader, your ongoing support is invaluable to the continued success of MBZUAI.

Heartfelt congratulations on achieving this significant milestone in your academic career. On behalf of the entire MBZUAI community, it is my pleasure to wish you every success for the future.

Share your moments
with the **MBZUAI hashtags**

#mbzuaigrads
#mbzuai2024

Socialize with us

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