

# CASCADE

November 2021 Issue



**College of Computing & Informatics** 



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# **Dean's Message**



It gives me great pleasure to welcome you all to our first issue of Cascade magazine.

The College was established in 2019 to fulfill the vision of his highness Sheikh Dr. Sultan bin Mohammed Al Qasimi, Member of the Supreme Council, Ruler of Sharjah, and President of the University of Sharjah to offer distinctive and multidisciplinary-interdisciplinary programs with world-class curriculums to serve other Colleges at UoS, the Community and the UAE national agenda focusing on artificial intelligence, cyber security, smart sustainable cities, digital health and the other ICT strategies developed by the government.

The College comprises three Departments: Computer Engineering, Computer Science and Information Systems. While each has a distinct identity, together they present a unique, compelling and important critical understanding on the future role of technology in modern life.

We currently offer a range of unique, distinctive and modern programs in the areas of computer engineering (BSc, Master, PhD in Computer Engineering), Computer science (BSc, MSc in Computer Science, BSc in IT-Multimedia) and BSc in Business Information Systems. These programs are accredited by the ministry of education and the Accreditation Board for Engineering and Technology, ABET, and they are preparing and equipping our students with the latest skill set required for the job market teaching them advanced programming languages, platforms with practical work using state of art facilities in the areas of artificial intelligence, robotics, cyber security and data analytics.

At the time of writing this message, the College has proposed in collaboration with other Colleges in the University six distinctive programs being already considered for approval by the ministry of education including four master of science degrees in Artificial Intelligence, Cyber security engineering, Business analytics, Data science, and two Bachelor of science degrees in cyber security engineering and biomedical informatics.

The College is driven by passionate heartfelt, outstanding and dedicated faculty and staff members, attracting promising and resilient students. We are committed to building within UoS an outstanding Computing and Informatics College, set to support the other Colleges within the University through the development of multi-interdisciplinary programs and equip our students with the right competencies and needed skills of innovation and entrepreneurship to produce highly qualified graduates empowered with the knowledge, skills and personalities that will enable them to transform the future of ICT in UAE and serve our beloved Emirati community.

Prof. Abbes Amira

Dean of the College of Computing and Informatics



### **Student's Corner**

#### University of Sharjah's Google Developer Student Club























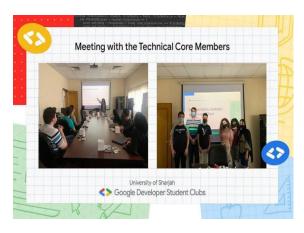


#### **Student's Corner**

#### University of Sharjah's Google Developer Student Club









Google Developer Student Club at University of Sharjah established in 2021. Google August Developer Student Clubs are university based community groups for students interested Google in developer Students technologies. from undergraduate or graduate programs with an interest in growing as a developer are welcome. By joining a GDSC, students grow their knowledge in a peer-to-peer learning environment and build solutions for local businesses and their community.

Google Developer Student Club at University of Sharjah organized several workshops such as introduction to big data and date gathering, security, artificial intelligence. They have also introduced QwikLabs and talked about MENA Challenge to UoS students. They are going to organize different events, competitions and collaborate with other Google Developer Students Clubs in the country to have bigger impact on community. Join us now.

GDSC bridges the gap between theory and practice for student developers.

# **College Interdisciplinary Lab**









The new CCI Interdisciplinary Lab will be an innovation hub to enable CCI students to work on interdisciplinary projects within the College and in collaboration with the other Colleges at the University of Sharjah. The new facility will be also used for showcasing CCI graduation projects and will bring together faculty members from the CCI three departments to work on innovative interdisciplinary projects. Members of CCI special teaching interest groups and students are encouraged to use the facility and work on different initiatives with other Colleges.



#### Campus visit of H.E SHK Fahim Bin Sultan Al Qasimi

The Dean of the College of Computing and Informatics received Prof. Dr. Abbes Amira Al Sheikh Fahim Al Qasimi, CEO of the Department of Government Relations in Sharjah, who is also the Chairman of the College's Advisory Council. They discussed creating prospects for cooperation and how to implement them for the current academic year. During a tour of the College's new multidisciplinary laboratory, Sheikh Fahem acquainted with the College students' projects in this laboratory in the departments of computer science, computer engineering and information systems. Sheikh Fahem also looked at projects in the fields of drones, blockchain, Internet of things and artificial intelligence in several fields.

#### **Meeting with Huawei**

The College discussed the progress on the current MoU and future plans including training and equipping the CCI Interdisciplinary Lab.





# **Meeting with Sharjah Chamber of Commerce & Industry**

The College met with Mr. Mohamed Ahmed Ameen, General Director of Sharjah Chamber of Commerce & Industry and discussed training opportunities in cyber security and AI.



#### Dean's TV Interview

Prof Abbes Amira has explained the College programs and how to serve the work placement. He elaborated on the equipment laboratories and how to serve the student during his educational, requirements for admission to College, number of students are currently studying, the capacity of new students for new academic year 2021-2022.

#### **New Students Orientation Day**

Dean's welcome to all students, discuss and explain College vision, mission, facts & figures, management team, educational programs, CCI alumni, our employers, students associations, students club, CCI advisory board, some recent CCI MoUs & industrial links, online learning and some points to take it.

All head departments introduce their team, provide and explain College programs for students and how to serve the work placement. The advising committee delivers tips and hints about academic advising to the new students.

The presidents of students' clubs have provided guidance and explained student life at university. The orientation day was concluded with Q/A session.



# البرنامج الوطني للذكاء الاصطناعي البرناء الاسطناعي البرناء الاسطناعي البرناء الاسطناعي البرناء الاسطناعي البرناء الاسطناعي البرناء الاسطناعي المسلمان المسل

#### **Scientific Trip to AI Office**

College of Computing & Informatics organized a scientific trip to Al Office led by Minister H.E. Omar Alolama and part of Prime Minister Office. The students got to know about the on going projects that are related to Al in the country and a workshop about introduction to robotics is delivered. The students have been also introduced to Dubai Future Foundation that is led by CEO H.E Khalfan Belhoul. The students got engaged in group workshop about the future of UAE and how they can make a difference.



#### Visit to College of Fine Arts & Design

Several collaboration opportunities have been explored in the areas of artificial intelligence and virtual reality with applications to smart textile and interior design.

#### Visit to College of Dentistry

To explore collaborations opportunities in the areas of robotics, computer vision, AI with with applications to digital dentistry.



#### **Meeting with the College of Sciences**

The meeting discussed the formation of Multidisciplinary Programs Committee. The Colleges explored the involvement of artificial intelligence in teaching. The meeting concluded the potential collaborations in terms of new interdisciplinary program and supervision of Senior Design Projects.





**UAE Codes: Annual Honoring Day for Coders** 

Illiteracy nowadays is NOT inability to read and write. Illiteracy nowadays is if you don't know how to program. Programming becomes an essential skill that our kids have to learn in early stage and a fundamental practice for our university students. All students in different Colleges at University of Sharjah take programming courses. The future of nations are in hands of programmers, who develop programs to solve problems and make our lives easier, safer and happier. We are surrounded by applications and systems. We are breathing technology. Our lives are reshaped by latest programs in different fields not only computing but computing is served for other fields of sciences, medicine, health sciences, humanities, journalism, banking, ...etc.University of Sharjah is aligned with country vision to empower our future programmers and produce enough of them to meet the heavy market demand. University of Sharjah is one of top three universities in computer science in the country. University of Sharjah is the first who offered master degree in computer science. The College of Computing and Informatics at University of Sharjah serves other Colleges and address their needs in fields of artificial intelligence, Internet of things cloud and blockchain. All need programmers. The College organizes programming contest on yearly basis and send the winners to compete with others in GCC level. We also have students clubs who teach the community about latest programming languages in different fields. University of Sharjah celebrates "UAE Codes" and delivers several talks, seminars and competition.

#### Welcome Speech H.H Prof. Hamid Al Naimiy, Chancellor of UoS

Short Talk

Prof Abbes Amira, Dean of College of Computing & Informatics

Talks from CCI Faculty

Dr. Abdullah Hussein, Computer Science Department Dr. Talal Bonny, Computer Engineering Department Dr. Saadat Mehmood, Information Systems Department

Alumni Talks

Coding and Beyond: Dive into the World of Cloud Computing Masa Abushamleh, Developer Advocate, IBM

Programming around Globe: VMware Perspectives Fatimah Al-Rahmani, Technical Account Manager, VMware

From Zero to Hero: Software Development Shorook Saleh, Fullstack Developer, eCards, eFinance

Programming Hints and Tips by CCI Clubs

Google Developer Student Club: Google Resources & QwikLabs
UoS ACM Branch: ACM Guide to Programming
UoS IEEE Computer Society Branch: Can We Program a Hardware?
CCI Club: Your Programming Journey starts from Problem Solving

Competition

Concluding Remarks

# Winning/Successful Stories



**Best Research Award** 

Prof Ahmed Khedr from Computer Science Department is the winner of the Annual Incentive Awards in 2020/2021. Congratulations.



#### **Sharjah Islamic Bank Award**

Congratulations Mohamed Abdelhady, Ibrahim Maher and Mohamed Al Sabi for winning Sharjah Islamic Bank Award for their senior project.

# **UoS Alumni Amany Abu Safia and our Alumni Balsam Alkouz got the IEEE WISC Award:**



#### **Amany Abu Safia**

A Ph.D. student under the supervision of Athman Bouguettaya at the University of Sydney. She received her bachelor's degree and her master's degree in Computer Science from the University of Sharjah, United Arab Emirates, in 2009 and 2013 respectively. She worked as a lecturer at the Department of Computer Science at University of Sharjah for 6 years. Her research interests include service computing, crowdsourcing, and IoT.



#### **Balsam Alkouz**

A PhD student under the supervision of Prof. Athman Bouguettaya at the University of Sydney. She received her bachelor's degree in IT Multimedia and master's degree in Computer Science from the University of Sharjah, United Arab Emirates, in 2016 and 2018 respectively. She worked as a Research Assistant in the Data Mining and Multimedia Research at the University of Sharjah. Her interests focus on IoT, service computing, and include data mining. She is a Women Techmakers Ambassador and a Google Developer Student Club strategy and operations team member at the University of Sydney.

# **Research Informing Teaching**



Fatima Dakalbab

BSc in Information Technology Multimedia, GPA 3.92

After earning my bachelor's degree in information technology multimedia from the University of Sharjah, I wanted to explore my passion for learning and increase the knowledge that I gained. Therefore, I applied to study MSc in Computer Science since I was driven by the enjoyment for research, when I worked as a part time research assistant and conducted a systematic literature review research study on machine learning techniques in anomaly detection. My research interest includes inter-blockchain communication, Internet of things (IoT), and Machine learning in character designing as one of my skills is drawing. Moreover, I am currently a member at Sharjah Google Developer Group (GDG) and Arab Women in Computing Association (ArabWIC) since 2016.



Youssef Mohammad Mansour

BSc in Computer Science, GPA 3.70

My name is Youssef Mansour and I am a graduate from the University of Sharjah with the Bachelor of Science in Computer Engineering. Programming has always been one of my hobbies and as a result, I tend to be quite good at it and have a decent background about it. Some of the topics that have always caught my interest include machine learning, mobile and computer applications, computer graphics, and generally anything that has to do with coding. During my MSc program, I am hoping that I would be able to explore the computer science field and dive deep into the programming and coding side of it as that is where I can see myself thrive. I am confident that during my time in this program, I will be able to be of great contribution to this field.



**Hamdan Hammad** 

BSc in Computer Science, GPA 3.71

My name is Hamdan Hammad. I was originally born in Sharjah and now I'm a Masters student at University of Sharjah. My special skills include thinking outside the box, resilience, problem-solving skills, and analytical skills.

I opted to pursue the MSc degree to prepare for graduate study at the doctoral level to expand my knowledge of fields related to their current areas of professional specialization, to study a field I love and to explore future employment in a related area, to acquire skills in new technologies and methods that have developed in their fields, and to prepare for entrepreneurial projects that require expertise in a specific field of study.

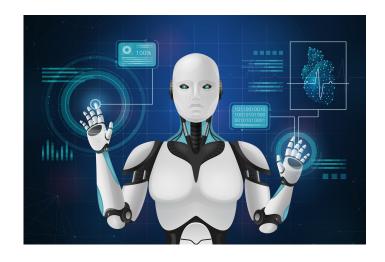


Abdullah Mohammed Alamoodi

BSc in Computer Engineering, GPA 3.80

My name is Abdullah Mohammed Alamoodi and I am an ambitious post-graduate computer engineering student who has the motivation to learn and acquire new experimental skills and knowledge by enrolling within the professional working environment. Some of the Skills that I have is programming languages like Python and C++, as well as controlling raspberry pi and Arduino. The area that interests me is the artificial intelligence, machine learning and security which are used in the most technology now. During my MSc program, I seek for building my experience in these areas and to publish some papers within known conferences and journals.

## **Future Events**



#### Al Week with Digital Health

in Collaboration with Colleges of Medicine, Pharmacy, Dentistry and Health Sciences (TBC).

#### **Cybersecurity Week**

in Collaboration with Colleges of Business, Law and Communication and in Conjunction with 2022 Symposium on E-Commerce and Cybersecurity (March 2022).





# College of Computing and Informatics

University of Sharjah

E:CCI@sharjah.ac.ae T: +971 6 5050524

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