Hamad H. Alsheraifi

Research Assistant at Khalifa University (KU)

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Education	**U.A.E. University (UAEU)** Al Ain, Abu Dhabi

U.A.E. University (UAEU)   Al Ain, Abu Dhabi
B.Sc. Computer Engineering   May 2021
Major GPA: 3.68
Cumulative GPA: 3.51

Honors and Awards

Member of AlNokhba (*The Elite*) Program: One of the 32 (1%) selected, by KU and National Service & Reserve Authority (NSRA), in the 17th Batch of UAE national service across the country to train and enhance our research skills at KU.   June 2022 – Present

Invited Paper: Received an invitation to the IEEE BigData 2022 for outstanding results and team presentation on our research project of tabular-based GAN model for classification.   August 2022

Winner of Fall 2020 Best Senior Project Contest, UAEU: Out of the 39 senior projects to be presented on the Fall of 2020, my team and I were both nominated and secured first place.   December 2020

Dean's List: Maintained a minimum GPA of 3.6 per semester.   2018-2020

Papers/Posters

Using Generative Adversarial Networks to Simulate System Calls of Malicious Android Processes   *Submitted Paper*
Hamad H. Alsheraifi, Hussain M. Sajwani, Saeed M. Aljaberi, Abdelrahman A. Alblooshi, Ali H. Alhashmi, Saoud A. Sharif, Ernesto Damiani.
IEEE BigData, 2022

Scooter Incident Reporting System   *Poster+Paper*
Hamad H. Alsheraifi, Mohammed Alaryani, Ali H. Alhashmi, Hamad S. Alqahtani, Hasan Alali.
Senior Graduation Project Committee, UAEU, 2020

Availability of Healthy Food Options For Diabetic Students   *Poster*
Mahmoud Elhussin, Hamad H. Alsheraifi.
4th UAEU Annual Undergraduate Student Research Conference, 2018.

Research Experience

Research Assistant   September 2022 – Present
Center for Biotechnology (BTC), Khalifa University (KU)
Mentors: Dr. Vijay Wadi (BTC), Dr. Mariane Daou (BTC)
My main task is to analyze the data and incorporate AI to the current project held in BTC regarding wastewater surveilance in the UAE.

I built an ML prototype, with pre-processing features, that currently uses XG-Boost for training and predicting the number of viral counts after a week. I also train under BTC staff and help them in the lab work, both in BTC and in the wastewater facility, on various bio-related tasks.

Generative Adversarial Network Project   July 2022 – October 2022
Emirates ICT Innovation Center, KU
Mentor: Prof. Ernesto Damiani (C2PS)
Performed GAN model design, utilized multiple ML trees and activation functions for determining optimal results. Contributed on the paper, emphasizing on literature review, abstract, GANs overview, testing, conclusions, and on optimization decisions for future research.

On-Board Computer Simulation   January 2021 – April 2021
National Space Science & Technology Center, UAEU
Advisor: Dr. Mohammad Naouss (NSSTC)
Developed a desktop-GUI OBC simulation, using Python and Arduino, that acts as a replica to the telecommand/telemetry process in the satellite with UART as the communication protocol. Provided presentations at NSSTC. Contributed with NSSTC's "GNSSaS Weekly Project Meeting" to follow up with the entire team's progress and to share updates on my development status.

Scooter Incident Reporting System   January 2020 – December 2020
College of Information Technology, UAEU
Advisor: Dr. Fekri Kharbash (UAEU)
This was my undergraduate capstone. My roles include the contribution to the paper regarding my technical tasks, literature review, and revision prior to submission. I also handle the communication configuration algorithm and process between the device and the IoT platform. I also design the poster for the second presentation, as our team were nominated.

Teaching
Experience

Peer Tutor, Tutorial Center (UAEU)   Fall 2017
UGRU English Levels 1-4
Assisted students in English language mainly in Speaking, Writing, and Grammar. Helped students prepare for English tests, both IELTS and UGRU.

Sample
Presentations

GAN-Based Training for Binary Classifier   August 2022
AlNokhba Program: Mini Project

A Simple Trick to Improve Positive Thinking   March 2021
Employability Skills Program

Skills

Programming

C++, Python, Latex, Rust, Linux Command Line, Arduino, Java, Verilog, Embedded C

Artificial Intelligence

Linear Regression/Classification, Preprocessing, Ensemble Learning (trees), ANNs, CNNs, GANs, Computer Vision (OpenCV), Tensorflow, Keras

Web-Development

HTML, CSS, JavaScript, Bootstrap, WordPress, Django, GitHub Pages

Volunteering and Extracurricular

Participated in the UAEU Science & Innovation Park (UAEU SIP) event "Coronavirus Awareness Contest" as a web-dev participant.   March 22, 2020

Volunteered at UAEU's Sports Complex in helping organize and manage chess tournaments at UAEU.   Fall 2017 – Fall 2019

Volunteered in the University Health Promotion Program: Students' Needs Assessment at UAEU.   February 2019

Attended the IEEE 13th International Conference on Innovations in Information Technology.   November 2018

Volunteered for several days at a veterinary clinic for a research project to raise awareness on the common ailments found in cats and dogs in the UAE. The project is compiled in a video format.   March – April 2018

Participated in the 4th UAEU Annual Undergraduate Student Research Conference 2018 to share our research based on the prevalence on diabetes in the UAE.   April 2018

Service

U.A.E. National Service   March 2022 – Present

Duration of service: 16 months. Expected graduation date: July 2023.