Hamad H. Alsheraifi

Research Assistant at Khalifa University (KU)

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Phone: +971553315449 LinkedIn: linkedin.com/in/hamadalsheraifi Citizenship: U.A.E.

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

B.Sc. Computer Engineering May 2021

Major GPA: 3.68 Cumulative GPA: 3.51

Relevant **Programming**

Skills Python, C++, Latex, Linux Command Line, Arduino

Data Science (AI-specific)

Machine Learning, Data Pre-processing, Feature Engineering, Time Series

Analysis/Forecasting, Model Tuning

Data Science TOOLS

Scikit-Learn, Pandas, Numpy, Matplotlib, Seaborn, Tensorflow, Keras, SDV,

OpenCV, IDEs [Jupyter, Kaggle, Google Colab]

Web-Development

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

Research Experiences **Research Assistant** — Al-Nokhba Program September 2022 — Present

 $Center\ for\ Biotechnology\ (BTC),\ Khalifa\ University\ (KU)$

Mentors: Dr. Vijay Wadi (BTC), Dr. Mariane Daou (BTC)

My research objective is to create a time-series machine learning model for wastewater surveillance using the dataset provided. I also work at the wastewater lab, where I perform the filtration, extraction, PCR, and digital PCR analysis procedures of RNA from wastewater samples, including the reporting after

all processes.

GANs Research Project — Al-Nokhba Program — July 2022 — October 2022

Emirates ICT Innovation Center, KU

Mentor: Prof. Ernesto Damiani (C2PS)

Designed a GAN model, utilizing Random Forest as my classifier, for our research project. Contributed on the paper, emphasizing on literature review, abstract, GANs overview, testing, conclusions, and on optimization decisions.

On-Board Computer Simulation

January 2021 - April 2021

National Space Science & Technology Center, UAEU

Internship Project — 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

Undergraduate Project — Advisor: Dr. Fekri Kharbash (UAEU)

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 and final presentation.

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.

Honors and Awards **Member of Al-Nokhba Program**: One of the 32 selected by KU and National Service Reserve Authority (NSRA), in the 17th Batch of UAE national service 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

Publications

Long-Term Study on Wastewater SARS-CoV-2 Surveillance Across United Arab Emirates **Communicated** *

Vijay S. Wadi, Mariane Daou, Noora Zayed, Maryam Aljaberi, Hamad H. Alsheraifi, Saeed S. Aldhaheri, Miral K. Abuoudah, Mohammed Alhammadi, Malika Aldhuhoori, Alvaro Lopes, Abdulrahman Alalawi, Ahmed Yousef, Shadi

Hasan, Habiba Alsafar.

Science of the Total Environment

Using Generative Adversarial Networks to Simulate System Calls of Malicious Android Processes Published

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

Poster

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

Mahmoud Elhussin, Hamad H. Alsheraifi.

4th UAEU Annual Undergraduate Student Research Conference, 2018.

Volunteering and Extracurricular

Participated in the UAEU Science & Innovation Park (UAEU SIP) event "Coro navirus 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 13^{th} 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