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

> **B.Sc.** Computer Engineering May 2021

Major GPA: 3.68 Cumulative GPA: 3.51

Relevant **Programming** 

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

AI for Data Science

Linear/Non-linearity, Regression/Classification, Data preparation, Hyperparameter Tuning using RandomizedSearchCV, RNNs, GANs, OpenCV

**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

rience 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

Papers/Posters

# Long-Term Study on Reliability of Wastewater SARS-CoV-19 Surveillance Across UAE Under Preparation

Vijay S. Wadi, Mariane Daou, Noora Zayed, Maryam Aljaberi, Hamad H. Alsheraifi, Saeed S. Aldhaheri, Miral K. Abuoudah, Ahmed Yousef, Shadi Hasan, Habiba Alsafar.

Science of the Total Environment

## Using Generative Adversarial Networks to Simulate System Calls of Malicious Android Processes \*\*Accepted Paper\*\* Accepted 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.

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