

Ibrahim Aldarmaki

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EDUCATION

The University of Edinburgh B.Eng. Electronics and Electrical Engineering (First Class Honors) • Thesis: Deep Neural Networks for Direction of Arrival Estimation using Circular Microphone Arrays	Edinburgh, UK 2020–2023
United Arab Emirates University (Transferred) B.Sc. Electrical Engineering GPA: 4.0/4.0	Al Ain, UAE 2019-2020
Applied Technology High School Advanced Science Program/Elite Sector Class Rank : 1 Country Rank : 6	Fujairah, UAE 2015-2019

RESEARCH EXPERIENCE

Associate Researcher, Khalifa University (KU) • Working on wireless sensing for healthcare applications using signal processing and machine learning.	Abu Dhabi, UAE 09/2024 – Present
Associate Researcher, Mohamed Bin Zayed University of Artificial Intelligence (MBZUAI) • Worked with Prof. Tamar Solorio on predictive & generative code-switching models. • Worked with Prof. Bhiksha Raj and Dr. Hanan Aldarmaki on multi-channel speech enhancement & speech separation.	Abu Dhabi, UAE 12/2023 – 04/2024
Space Science Researcher, Mohammed Bin Rashid Space Center (MBRSC) • Conducted in-depth research on the Emirates Mars Mission (EMM), exploring Martian surface diurnal temperature and characterizing its' thermophysical properties. • Developed and presented thermophysical properties estimation algorithms that surpassed current industry standards in accuracy and efficiency.	Dubai, UAE 06/2022 – 08/2022

PROFESSIONAL EXPERIENCE

Signal Processing Summer School, University Defense Research Collaboration (UDRC) • Engaged in theoretical and practical sessions in statistical signal processing, tracking & sensing, machine learning, and source separation.	Edinburgh, UK 06/2023
Teaching Assistant, The University of Edinburgh • Facilitated the learning process in the second-year digital systems design course in analyzing and designing combinational and sequential gate-level circuits.	Edinburgh, UK 04/2023 – 05/2023
Treasurer and Committee Member, EUEEE Society • Managed funds allocations as the treasurer of the Edinburgh University Electronics and Electrical Engineering (EUEEE) Society. • Organized events for the EUEEE Society.	Edinburgh, UK 09/2022 – 05/2023
Relations Manager and Committee Member, Emirati Students Society • Organized and managed a wide range of events as the Relations Manager for the Emirati Students Society at The University of Edinburgh, resulting in successful events.	Edinburgh, UK 09/2022 – 05/2023
Teaching Assistant, The University of Edinburgh • Served as a teaching assistant for the third-year digital systems design course. • Guided students in developing synchronous digital circuits and realizing finite-state machines from high-level functional specifications and prototyping them on FPGA hardware.	Edinburgh, UK 09/2022 – 05/2023

PUBLICATIONS

- **Ibrahim Aldarmaki**, Tamar Solorio, Bhiksha Raj, Hanan Aldarmaki "ReUNet: Relative Channel Fusion U-Net for Multichannel Speech Enhancement," Submitted to ICASSP 2025, September 2024.

SKILLS

Python, PyTorch, TensorFlow, MATLAB, Minitab, Java, C, LTSpice, Xilinx, Verilog HDL, Basys3 FPGA, STM32 Board