MAJID AHMED
Ajman, United Arab Emirates
+971544337609
majedf429@gmail.com

OBJECTIVE

An Electrical engineer who is eager to leverage academic expertise and hands-on experience in roles that foster innovation and problem-solving. Committed to contributing to cutting-edge projects and advancing technology in a collaborative team environment.

EDUCATION

2022 – Present	**American University of Sharjah**, Sharjah, UAE Master of Science in Electrical Engineering Expected graduation date: December 2024
2018 – 2022	**American University of Sharjah**, Sharjah, UAE Bachelor of Science in Electrical Engineering (**cum laude**) graduation date: June 2022

Work

2022 – 2024	**American University of Sharjah**, Sharjah, UAE Graduate Research Assistant: • Led the development of an amateur portable satellite ground station

AWARDS, HONORS, & Memberships

2019- 2022	Placed on the Dean's List 4 times and on the Chancellor's List twice.
2023	IEEE Eta Kappa Nu (HKN) Member
2024	Tau Beta Pi (TBP) Engineering Honor Society Member

COMPUTER SKILLS

- Python Programming
- MATLAB programming
- Siemens TIA Portal for PLC programming
- Keysight's Advanced Design System (ADS)
- ANSYS Electronics (HFSS)
- NI LABVIEW
- ORCAD PSPICE circuit simulations
- NI MULTISIM & ULTIBOARD
- Dspace

RESEARCH PROJECTS

- **Design of Class AB Amplifier:** Designed a Class AB amplifier for high-frequency applications using Keysight ADS.

- **Pyramidical Horn Antenna Design:** Designed and verified the performance of a horn antenna for a 2.6-3.95 GHz frequency range using Ansys Electronics for performance simulation followed by 3D printing to fabricate the antenna.

- **Photovoltaic System Design:** Simulated the design of a buck-boost converter to implement an MPPT control algorithm.

- **Portable Amateur Satellite Ground-station:** Developed a software program that calculates satellite orbits, controls antenna rotator positioning, and interfaces with a software-defined radio (SDR) to receive satellite transmissions.

- **Microwave Non-destructive Testing for food:** Studied how the dielectric properties of cold cuts change as spoilage occurs and designed a simplified proof of concept measurement setup to detect spoilage.

- **Design of a 4x4 Butler Matrix:** Designed a 4x4 Butler matrix for analog beamforming applications through electromagnetic simulations.

- **Automatic Modulation Classification:** Investigated the use of machine learning for automatic modulation classification for varying signal to noise ratios.

- **2D Brain Tumor Segmentation:** Investigated the use of machine learning to segment brain tumor region using 2D slices from multimodal MRI scans.

- **2D FDTD Horn Antenna Simulation:** Developed a simplified electromagnetic simulation of a horn antenna.

PUBLICATIONS

1. Ahmed, M. and Hammi, O. (2024) 'Hybrid digital/analog predistorter architecture with enhanced robustness to hardware impairments', IEEE Access, 12, pp. 113928–113943. doi:10.1109/access.2024.3443538.
2. S. Ahmed, M. Ahmed, S. Bensmida, and O. Hammi, "Power amplifier predistortion using reduced sampling rates in the forward and feedback paths," MDPI, https://www.mdpi.com/1424-8220/24/11/3439.
3. M. Ahmed, A. S. Zakaria, and O. Hammi, "A low-cost portable and agile amateur satellites ground-station," 2023 IEEE 9th International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA), Oct. 2023. doi:10.1109/icsima59853.2023.10373492
4. M. Ahmed, A. Dalbah, O. Hammi, and F. M. Ghannouchi, "Neural Networks based behavioral modeling of dual-band RF power amplifiers using augmented bilstm structures," *2024 International Conference on Artificial Intelligence in Information and Communication (ICAIIC)*, Feb. 2024. doi:10.1109/icaiic60209.2024.10463289
5. A. Ali, M. Ahmed, and O. Hammi, "BiLSTM neural network DPD with reduced feedback sampling rate," 2023 IEEE Symposium on Wireless Technology and Applications (ISWTA), Kuala Lumpur, Malaysia.

ADDITIONAL SKILLS

- Pays attention to details
- Meets deadlines
- Teamwork
- Familiar with poster presenting
- Willing to accept feedback

Languages
- Arabic, English   Fluent