Eslam Hasan

PhD Candidate in Computer Science, Tennessee Tech University

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EDUCATION

Tennessee Tech University **Cookeville, TN**

Ph.D. in Computer Science *2025*
Supervisor: Assoc. Prof. Muhammad Ismail, IEEE Senior Member, Director of Cybersecurity Education, Research and Outreach Center (CEROC).

Mansoura University **Mansoura, Egypt**

M.Sc. in Electrical Engineering (Electronics and Communications) *2020*
Supervisors:
Prof. Sherif Kishk, Assistant Minister of Higher Education and Scientific Research for Smart Governance.
Dr. Ehab Hany Abdelhay, Programs Director at Faculty of Engineering Mansoura National University.

Information Technology Institute **Cairo, Egypt**

Diploma in Information Technology (Mobile and Open Source Applications Developer Program) *2015*
Supervisor: Eng. Mohamed Gabr.

Mansoura University **Mansoura, Egypt**

B.Sc. in Electrical Engineering (Electronics and Communications) *2013*

ACADEMIC EXPERIENCE

Tennessee Tech University, Cookeville **2022-2025**
Research Assistant

- Work on a collaborative research project between USA and Japan "Softwarization of Intelligence for Efficient 6G Mobile Networks" under NSF award number 2210252.

American University in Cairo **2021-2022**
Teaching Assistant

- DSCI 2411 - Data Visualization

Modern Academy for Engineering and Technology, Cairo **2015-2022**
Teaching Assistant

- CMP111 – Logic Circuit Design
- ELC211 – Signal analysis
- ELC215 – Analog Communication Systems
- ELC321 – Digital Communication Systems

PUBLICATIONS

Journal

- E. Mahalal, **E. Hasan**, M. Ismail, Z.-Y. Wu, M. M. Fouda, Z. M. Fadlullah, and N. Kato, "GAN-based Artificial Noise Generation Against Eavesdropping In Dynamic Indoor LiFi Networks," **Under Review** in IEEE Transactions on Wireless Communications.

- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, and N. Kato, "mmWave and Terahertz Indoor Channel Prediction under Data Drift in Real-world Scenarios," **Under Review** in IEEE Transactions on Cognitive Communications and Networking.
- **Eslam B. Ali**, Kishk, S. & Abdelhay, E.H. Multi-device Multi-task Computation Offloading in Device to Device Communication. Wireless Pers Commun 123, 1883–1896 (2022). **https://doi.org/10.1007/s11277-021-09219-z**
- **Eslam B. Ali**, Sherif Kishk, Ehab H. Abdelhay, Multidimensional auction for task allocation using computation offloading in fifth generation networks, Future Generation Computer Systems, Volume 108, 2020, Pages 717-725, ISSN 0167-739X, **https://doi.org/10.1016/j.future.2020.02.021**.

Magazine

- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, and N. Kato, "Towards Robust Channel Prediction in 6G Networks: Mitigating the concept drift using ISAC," **Under Review** in IEEE Wireless Communications.

Conference

- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, and N. Kato, "Sensing-aided Terahertz Channel Prediction: A Robust Deep Learning Approach Against Concept Drift," **To Be Submitted** in 2025 IEEE Global Communications Conference (GLOBECOM), 2025.
- E. Mahalal, **E. Hasan**, M. Ismail, Z.-Y. Wu, M. M. Fouda, and Z. M. Fadlullah, "Deep Learning-based Physical Layer Authentication Against Impersonation Attacks in LiFi Networks," **Under Review** in 2025 IEEE 60th International Conference on Communication (ICC), 2025.
- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, and Z. M. Fadlullah, "Communication-aided Terahertz Sensing: A Novel Indoor People Counting System Via Deep Learning," **Under Review** in 2024 IEEE 2nd Virtual Conference on Communications (VCC), 2024.
- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, and N. Kato, "Occupancy-level-aware Indoor Terahertz Channel Prediction: A Robust Deep Learning Approach," **Accepted** in 2024 IEEE 100th Vehicular Technology Conference (VTC2024-Fall), 2024.
- **E. Hasan**, E. Mahalal, M. Ismail, Z.-Y. Wu, M. M. Fouda, T. Koketsu Rodrigues, and N. Kato, "Robust deep learning-based indoor mmwave channel prediction under concept drift," in 2023 IEEE 98th Vehicular Technology Conference (VTC2023-Fall), 2023, pp. 1–5.

SUPERVISION

- Calvin Guzman (Undergraduate Student, Fall 2022-Spring 2023): Developing mobility simulator using Python that mimics human mobility as a part of 5G+ network simulator.
- Minh-nghi Vu (Undergraduate Student, Spring 2023): Developing mobility simulator using Python that mimics human mobility as a part of 5G+ network simulator.
- Matthew Burst (Undergraduate Student, Spring 2023 - Spring 2024): Developing channel simulator using Python for mmWave, THz and VLC as a part of 5G+ network simulator.

SERVICES

Session Chair

- Privacy and Security I, IEEE VTC2024-Fall, Washington DC, USA, October 2024.
- Radio Access Technology II, IEEE VTC2024-Fall, Washington DC, USA, October 2024.
- Radio Access Technology III, IEEE VTC2024-Fall, Washington DC, USA, October 2024.

Technical Program Committee (TPC) member

- IEEE Virtual Conference on Communications (VCC).

Reviewer

- **Conferences**
  - IEEE Vehicular Technology Conference (VTC).
  - IEEE VTS Asia Pacific Wireless Communications Symposium (APWCS)

- **Journals**
  - IET Communication

PROFESSIONAL MEMBERSHIPS

- IEEE Vehicular Technology Society Membership since 2024.
- IEEE Graduate Student Member since 2023.
- IEEE Communications Society Membership since 2023.
- IEEE Young Professionals since 2023.

CAMPUS ACTIVITIES

- Code for the gold, STEMlympics Safari Saturday, Oakley STEM Center, Tennessee Tech University.
- Global Ambassadors, Center for Global Experiences, Tennessee Tech University.
- Council Representative position, House Borg, Computer Science Department, Tennessee Tech University.

CONFERENCE PRESENTATIONS

- Occupancy-level-aware Indoor Terahertz Channel Prediction. October 2024
  IEEE 100th Vehicular Technology Conference, Washington DC, USA.
- Robust deep learning-based indoor mmwave channel prediction under concept drift October 2023 IEEE
  98th Vehicular Technology Conference, Hong Kong.

PROFESSIONAL DEVELOPMENT

- Next Generation Cloud Communications
  - Dates: September 21-23, 2023.
  - Location: Georgia Tech Research Institute, Atlanta, GA, USA.
- AI Summer School
  - Dates: August 12-15, 2024.
  - Location: Vanderbilt University, Nashville, TN, USA.