

Hind Mukhtar, M.ASc., P.Eng

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🌐 Hind Mukhtar

🌐 <http://HindMukhtar.github.io>

Employment History

- Jan. 2023 – Present 📌 **Data Scientist**, Satcom Direct
- June 2019 – Jan. 2023 📌 **Hardware Engineer**, Satcom Direct
- May 2017 – Sept. 2018 📌 **Hardware Design Intern**, Honeywell Aerospace
- May 2016 – Sept. 2016 📌 **Stations Engineering Intern**, Hydro One

Education

- 2021 – Present 📌 **Ph.D., University of Ottawa** Electrical and Computer Engineering.
Thesis title: *AI-Enabled Avionic Communications for Optimizing In-Flight Network Connectivity Experience*
- 2019 – 2021 📌 **M.ASc., University of Ottawa** Electrical and Computer Engineering.
Thesis title: *Machine Learning Enabled-Localization in 5G and LTE Using Image Classification and Deep Learning.*
- 2014 – 2019 📌 **B.ASc. Queen's University** Electrical Engineering.

Research Publications

Journal Articles

- 1 H. Mukhtar, R. Schaub, and M. E. Kantarci, "Qos prediction for satellite-based avionic communication using transformers," *IEEE Transactions on Machine Learning and Communications*, 2025.

Conference Proceedings

- 1 H. Mukhtar, R. Schaub, and M. E. Kantarci, "Skynetpredictor: Network performance prediction in avionic communication using ai," in *IEEE Symposium on Computers and Communications (ISCC)*, Bologna, Italy, 2025, under submission.
- 2 H. Mukhtar, R. Schaub, and M. E. Kantarci, "Air traffic and usage predictions in avionic communications using attention based vaegan model," in *IEEE International Conference on Machine Learning for Communication and Networking (ICMLCN)*, Stockholm, Sweden, 2024. 🌐 URL: <https://ieeexplore.ieee.org/document/10625144>.
- 3 H. Mukhtar and M. E. Kantarci, "Machine learning-enabled localization in 5g using lidar and rss data," in *2021 IEEE Symposium on Computers and Communications (ISCC)*, Athens, Greece, 2021. 🌐 URL: <https://ieeexplore.ieee.org/document/9631433>.
- 4 H. Mukhtar and M. E. Kantarci, "Satellite image and received signal-based outdoor localization using deep neural networks," in *IEEE Canadian Conference on Electrical and Computer Engineering (CCECE)*, ON, Canada, 2021. 🌐 URL: <https://ieeexplore.ieee.org/document/9569057>.

Skills

Languages	Strong reading, writing and speaking competencies for English and Arabic
Coding	Python, Pytorch, Tensorflow
Databases	MySQL, SQLite
Cloud	Microsoft Azure

Miscellaneous Experience

Speaking Events

2025 **Panelist**, Bridges of Sudan Professional Networking Event

Volunteer Positions

2024 – Present	Toastmasters Member , Toastmasters International
	Industry Liaison , ACM-W
2021	Secretary , IEEE Women in Engineering Ottawa Chapter
2018 – 2019	Electrical Team Manager , Queen's Mostly Autonomous Sailboat Team
	Residence Don , Queen's University
2015 – 2019	Programming Assistant , Robogals Global
2016 – 2017	Orientation Leader , Queen's University
2016	Computer Science Representative , Science Rendezvous

Awards and Achievements

2019	Admission Scholarship , University of Ottawa
	First Class Honours , Queen's University
	Second Place IEEE Capstone Competition , Queen's University
2015 – 2019	Dean's Scholar , Queen's University
2016	Women in Engineering Scholarship , Hydro One
2014	Excellence Scholarship , Queen's University

Certification

2024 **Professional Engineering License** Professional Engineers Ontario

References

Available on Request