

Ahmad Droobi

"Imagination is more important than knowledge"

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Contact Information

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Education

M.Sc. Computational Science and Engineering, University of Calgary, 2025

- Thesis Title: Lagrangian Data Assimilation (QG Equation)
- Advisor: Mustafa Mohamad (MIT PhD, Postdoc Courant Institute of Mathematical Sciences at NYU)

B.Sc. Computer Engineering, An-Najah National University, 2022

- Graduated with 2 years of industrial real experience.
- Thesis Titles:
 - HW: P&P CNC (Simple Electrical Circuit Builder - \$2000)
 - SW: Search Engine that recommends recipes from ingredients
- Advisors: HW: Raed Qadi, SW: Mona Demadi

Research & Teaching Experience

Graduate Research Assistant, University of Calgary, Sep 2023 - Sep 2025

- Predictive & Intelligent Systems Lab

Graduate Teaching Assistant, Schulich School of Engineering, UofC, 2023-2025

- ENME 505 Robotics

</> Industrial Experience

Python Engineer ITG Software

**Feb 2023 - Aug 2023
Ohio, USA**

- Created a new site for Kiboko, a subscription-based service allowing organizations to collect and analyze their data from Google Analytics using BigQuery APIs.

Machine Learning Engineer Harri

**Feb 2022 - Jan 2023
New York and Ramallah**

- Served the AI/ML team, worked on time series and forecasting projects to predict hiring needs for restaurants and retailers.
- Coordinated with the data team to create a data pipeline, using time series forecasting algorithms; built backend system with Django; created a bridge between backend and data science team.
- Developed new algorithms and backend solutions for an employee forecasting product used by 20 clients.

Undergraduate Researcher EquiTech Futures

**Sep 2022 - Jan 2023
Chicago, Illinois**

- Applied machine learning techniques to real-world datasets for climate forecasting and wind speed prediction.
- Developed proficiency in Python through Coding Gym sessions.
- Conducted independent research and team projects; presented findings and wrote reports.
- Collaborated on designing experiments, analyzing and validating weather datasets.

Undergraduate Researcher Future Computing Technologies Lab

**Oct 2021 - May 2022
South Carolina, USA**

- Worked on real-time emotion recognition using deep learning with Google Colab, Tensorflow, OpenCV, and Dlib.
- Introduced deep learning techniques to improve recognition accuracy.
- Conducted extensive work on image and video input for emotion recognition.
- Achieved 97% training accuracy and 57.4% accuracy with the Haar cascade technique.

SWE Intern Apple Inc.

**May 2021 - Oct 2021
Herzliya, Israel**

- Supported a data stream interface project, building an internal system for managing inventories and labs.
- Implemented and iterated retrieve/update information using Django and React.

Professional Memberships

- Member, The Society for Industrial and Applied Mathematics (SIAM) 2024 - Present
- Member, Graduate Students' Association - University of Calgary 2023 - Present
- Member, UofC Data Science and Machine Learning Club 2023 - Present
- Member, IEEE 2021 - 2022
- Faculty of Honor, NNU 2019 - 2022

Skills

- Programming Languages: Python, C/C++, JavaScript, Java
- Tools: Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, NetBeans, Anaconda
- Libraries and Frameworks: Scikit-Learn, Seaborn, Pandas, NumPy, Matplotlib, Nltk, SciPy, Tensor-Flow, PyTorch, MATLAB, Mathematica

Honors

- Working with Prof. Mustafa Mohamad Research Team, fully funded
- Scholarship to join Machine Learning Summer School (Scientists for Palestine)
- Best SW & HW Graduation projects in the Year 2022 @ NNU
- Represented An-Najah National University in PCPC Palestinian collegiate programming contest for two consecutive years 2021, 2022
- The Hebba & Ishaq Sadaqah Foundation scholarship for talented students in Palestinian Universities
- Faculty of Honor 2019, 2020, 2021 at NNU
- First Place in 2017 Tawjihi (high school exit exam) scientific stream, Palestine Ministry of Education, Tulkarm
 - Ranked 1st among 75,000 students nationwide with a 99.71/100 score
 - Equivalent to 1600/1600 in SAT
- Scored first in 11th grade Math Olympics, Tulkarm (Al-Fadilyah Secondary School)
- Scored first in 9th grade Physics Olympics, Tulkarm

Volunteering

- Awards Committee Member, Graduate Students' Association, University of Calgary
 - Reviewed the following awards:
 - GSA Bursary
 - Excellence in Research - Graduate Student Award
 - Excellence in Teaching - Graduate Student Award
 - GSA Professional Development Grant (PDG)
- Teaching Assistant, Arabs in Neuroscience - AiN
- Chairman, United Holy Land Fund, Palestine (An-Najah National University Representative)
- Swimming Coach: Trained outstanding children in swimming, focusing on chest and butterfly techniques
- Math Teacher for high school and university students (Calculus 1, 2, 3, Linear Algebra, Physics 1, 2)

Languages

- English: Fluent
- Arabic: Native
- Hebrew: Beginner

Hobbies

- Swimming, Running, and Hiking
- Self-coding of new and challenging algorithms

References

Available upon request.