S. Yousef Oleyaeimotlagh

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SUMMARY

Looking for a Challenging Role Where I Can Leverage Expertise in Deep Learning, Optimization, and Big Data Analytics to Solve Complex Problems and Deliver Impactful, Data-Driven Solutions.

EDUCATION

University of Pittsburgh, Pittsburgh, PA, USA　　　　　　　　　　　　　　　　Dec 2025
Ph.D., Industrial Engineering

Iran University of Science & Technology, Tehran, Iran　　　　　　　　　　　　Feb 2013
Master of Science in Industrial Engineering

Urmia University, Urmia, Iran　　　　　　　　　　　　　　　　　　　　　　Aug 2010
Bachelor of Science in Applied Mathematics

SKILLS

Programming & ML Frameworks: Python, Scikit-learn, TensorFlow, PyTorch, NumPy, pandas, SciPy, Jupyter, C++, Java, Supervised/Unsupervised Learning, Neural Networks, CNN, LSTM

Optimization & Analytics: Gurobi, Git, Statistical Simulation, Time Series Forecasting

Big Data & Databases: Hadoop, Spark, AWS, GCP, MS Azure, MongoDB, MySQL, Neo4j

OS & Tools: Linux, Docker, LaTeX

RELEVANT EXPERIENCE

University of Pittsburgh, Pittsburgh, PA　　　　　　　　　　　　　　　Aug 2022 – Present
Graduate Research & Teaching Assistant, Swanson School of Engineering

- Developed Machine Learning Models for non-i.i.d. Random Processes using Statistical Simulation and Python-Based Optimization
- TA for Engineering Probability and Statistics, Probability Random Variables and Distributions

University of Texas at San Antonio, San Antonio, TX　　　　　　　　Dec 2020 – Aug 2022
Graduate Research Assistant

- Built Convolutional Neural Network (CNN) Models with TensorFlow for ECG-based Arrhythmia Detection, Achieving 85% Accuracy
- Analyzed Stochastic Systems via Supervised Learning Pipelines in Python

University of Central Florida, Orlando, FL　　　　　　　　　　　　　Sep 2016 – Jan 2020
Graduate Research & Teaching Assistant

- Engineered Spatial-Temporal Deep Learning Models (LSTM/RNN) for Time Series Forecasting, Integrating Big Data Tools Like Spark

Soft Film Novin Azerbaijan, Tabriz, Iran　　　　　　　　　　　　　　Apr 2013 – Sep 2013
Sales Intern

- Performed Exploratory Data Analysis on Sales Datasets using SQL for Inventory Optimization and Demand Forecasting

RESEARCH EXPERIENCE

Data Incubator Challenge   May 2019

- Placed in the top 2% for a data mining project analyzing homeless shelter data to identify patterns in homelessness among school-age children

AWS Cloud Student Ambassador   2019 – 2020
Amazon

- Led technical workshops and tutorials on core AWS services for the student community
- Promoted cloud computing literacy and best practices through on-campus events and outreach

Member, Young Researchers and Elites Club   2012 – 2015
North Tehran Branch, Islamic Azad University (IAU)

- Collaborated with peers on interdisciplinary research projects and presented at academic seminars
- Engaged in activities to foster scientific inquiry and develop advanced research skills

RELEVANT COURSES

- Deep Learning & Neural Networks
- Machine Learning & Data Mining
- Stochastic Processes
- Optimal Control

CONFERENCES

INFORMS Annual Meeting, Atlanta, GA   Oct 2025

Canberra Artificial Intelligence Summer School   Dec 2020

ICSTT, Orlando, FL   May 2019

PUBLICATIONS

- Y. Oleyaeimotlagh and T. Banerjee, "Modified Wald formulation for sequential binary hypothesis testing in statistically periodic processes," *Sequential Analysis*, Accepted for publication, 2025.
- Y. Hou, Y. Oleyaeimotlagh, R. Mishra, H. Bidkhori, and T. Banerjee, "Robust quickest change detection in nonstationary processes," *Sequential Analysis*, vol. 43, no. 3, pp. 275–300, 2024.
- Y. Oleyaeimotlagh, T. Banerjee, A. Taha, and E. John, "Quickest change detection in statistically periodic processes with unknown post-change distribution," *Sequential Analysis*, vol. 42, no. 4, pp. 404–437, 2023.
- A. E. Vela and Y. Oleyaeimotlagh, "Ground Level Aviation Noise Prediction: A Sequence to Sequence Modeling Approach Using LSTM Recurrent Neural Networks," in *Proc. 2020 AIAA/IEEE 39th Digital Avionics Systems Conference (DASC)*, San Antonio, TX, USA, Oct. 11–16, 2020, pp. 784–789.
- Y. Oleyaeimotlagh and A. E. Vela, "Inferring demand from partially observed data to address the mismatch between demand and supply of taxis in the presence of rain," *arXiv preprint arXiv:1903.06619*, 2019.