



# Ali Sarabi

@ alisarabi@asu.edu

+1 (323)-552-9293

Tempe, Arizona

linkedin.com/in/alisarabi

## PROFESSIONAL PROFILE

Experienced Data Scientist and researcher with strong foundations in machine learning, deep learning, large language models (LLMs), and optimization. Six Sigma Green Belt with hands-on experience turning complex data into actionable models and production-ready pipelines.

## EDUCATION

Ph.D. in Industrial Engineering (Data Science)

Arizona State University 2017 – Jul 2026

M.Sc. in Industrial Engineering

Sharif University of Technology 2014–2016

B.Sc. in Industrial Engineering

K.N. Toosi University of Technology 2010 – 2014

## PROFESSIONAL EXPERIENCE

- **Expeditise LLC (Venture Devil startup), Cofounder, 2024- present:** Led full-stack development of AI products using React/React Native, serverless AWS, GPT APIs, RAG, vector search, and OCR. Mentored 18 CS students through production deployment.
- **Arizona State University, Course Instructor, 2023- present:** Taught 7 courses, including Introduction to Engineering (FSE100) (Fall 2023: 39 students; Fall 2024: two classes, 53 students; Fall 2025: two classes, 81 students), Computer Science Capstone I (CSE485) (Spring 2024: 21 students), and Supply Chain Modeling & Analysis (CSE534) (Spring 2025: 21 students). Designed lectures and labs including LEGO Mindstorms EV3 robotics codes implemented in Python and MATLAB
- **Bayer Corporation, Data Scientist Coop, Customer Centricity Team, 2022-2023:** I developed deep learning models for selecting the best exogenous variables to include in the forecast and predict the world price dynamics of a chemical product in different market scenarios for the next three months.
- **Arizona State Opioid Response, College of Health Solutions at ASU, 2021:** Data analysis to develop models of opioid use disorder and medication-assisted treatment to identify, monitor, and target resource gaps by delivering actionable data to reduce opioid overdoses and deaths. I visualized the results by creating interactive dashboards in Tableau.
- **Adidas, 3D Data Visualization and Analysis, 2019:** Detecting skin chafing areas using machine learning (segmentation and edge detection algorithms) to provide feedback to players, athletic trainers, and equipment makers.
- **Salt River Project, 2018 Waste Characterization Study, 2018:** Data analysis to expose new areas of improvement in Salt River Project's sustainability initiative. A new analytical framework for measuring waste characterization procedure efficiently.
- **Sharif Advanced Machinery Development Company, Tehran, Iran, 2015-2017:** Writing Business Plan and Feasibility Study reports establishing the company in an Incubator and Market Share analysis.

## CERTIFICATES

- **Lean Six Sigma Green Belt Certification**, Arizona State University, Sep 2021, Credential ID 54866019
- **Developing LLM Applications with LangChain**, DataCamp, July 2024, Credential ID: 34917751
- **Convolutional Neural Networks**, Coursera, Feb 2021, Credential ID: 2VDGJGHAVCFE
- **Advanced Deep Learning with Keras**, DataCamp, Dec 2020, Credential ID: 16686157
- **Object-Oriented Programming in Python**, DataCamp, Dec 2020, Credential ID: 17209845
- **Recurrent Neural Networks for Language Modeling in Python**, DataCamp, Oct 2020, Credential ID: 16151449

- **Feature Engineering for Machine Learning in Python**, DataCamp, Sep 2020, Credential ID: 16151449
- **Streamlined Data Ingestion with pandas**, DataCamp, Sep 2020, Credential ID: 15977522
- **Getting Started with AWS Machine Learning**, Coursera, Aug 2020, Credential ID: MMVF6NELLNKF
- **Sequence Models for Time Series and Natural Language Processing**, Coursera, May 2020, Credential ID: ZJS9D3BZ7NDJ
- **Sequence Models**, Coursera, Jan 2020, Credential ID: GDPQ9HF2RD4A
- **Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning** Coursera, Sep 2019, Credential ID: 44W95J4MJFEW

## JOURNAL PAPERS

- **Sarabi Ali**, Sarabi Arash, Yan H., Sterner B., Jevtic P. (**Under Preparation**). Forecasting Coccidioidomycosis (Valley Fever) in Arizona: A Graph Neural Network Approach. <https://arxiv.org/abs/2507.10014>
- **Sarabi Ali**, Sarabi Arash, Yan H., Jevtic P., Runger G. (**under review**). A Graph-Based Neural Network Architecture for Time Series Forecasting, ICML 2026.
- **Sarabi Ali**, Xu B., Sarabi Arash, Jevtic P., Yan H. (**under review**). Temporal Difference Learning for Multi-Task Prognostics: Joint Remaining Useful Life Estimation and Failure Mode Classification, ICML 2026.
- Amin P. \*, **Sarabi A. \*** (**equal contribution as the first author**), Choe S., Scott, S., Suh S., & Atanaskova Mesinkovska N. (September 2025). Oral hyaluronic acid supplement: Efficacy in skin hydration, elasticity, and wrinkle depth reduction. *Journal of Drugs in Dermatology*. <https://doi.org/10.36849/jdd.8542>
- Arfaie S., **Sarabi A.**, Solgi A., Michaud E., Rohr E., Giampa L., Ieropoli E., Lasry O., Dudley RW. (November 2024). Hair-sparing Approach Versus Traditional Hair Clipping for Cerebral Spinal Fluid (CSF) Shunting Procedures: A Retrospective Comparative Study. *Journal of Neurosurgery: Pediatrics*. <https://doi.org/10.3171/2024.8.PEDS23548>
- Arfaie S. \*, Amin P. \*, Kwan A. T. H. \*, Solgi A. \*, **Sarabi A. \*** (**equal contribution as the first author**), ..., Fallah A. (February 2023). Long-term full-scale intelligent quotient outcomes following pediatric and childhood epilepsy surgery: A systematic review and meta-analysis. *Seizure: European Journal of Epilepsy*. <https://doi.org/10.1016/j.seizure.2023.01.020>

## HONORS AND AWARDS

- Recipient of the Dissertation Research grant from ASU's Graduate College for the academic year 2023-2024.
- Awarded Teaching Excellence twice as a course instructor for the 2023 and 2024 academic years.
- Awarded graduate fellowships for three semesters, along with a comprehensive five-year scholarship from ASU.
- I was ranked first out of 60 classmates in my B.Sc. study, Department of Industrial Engineering, K.N. Toosi University of Technology.
- Having the privilege of being exempted from M.Sc. entrance exam as an "Exceptionally Talented" student.
- Awarded full scholarship from K.N. Toosi University of Technology for bachelor's degree and full scholarship from Sharif University of Technology for master's degree.

## TECHNICAL STRENGTH

- **Development Skills:** Python (PyTorch, TensorFlow, Keras, Scikit-learn, Pandas, OpenCV, Spectral), MATLAB (Programming, GUI), AWS Services, React, Serverless, SQL
- **Data Science Skills:** Large Language Models, Deep Neural Networks, Classification, Clustering, Regression, Feature Selection, Dimensionality Reduction, Hypothesis Testing, Statistics
- **Other Skills/Tools:** Google Cloud, Tableau, Arena Simulation, LaTeX, ICDL, Visio