Amirmahdi Daraie

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Linkedin

"Life is a tragedy when seen in close-up, but a comedy in long-shot."
Charlie Chaplin

Education

Sharif University of Technology   Tehran, Iran
B.Sc. in Computer Engineering, Department of Computer Engineering   2020 – 2025

- **GPA**: 17.11/20
- **Research Interests**:
  Computational Neuroscience
  Brain Computer Interface
  Reinforcement Learning
  Deep Learning
  AI in Software
- **Relevant Coursework**:
  Machine Learning – 20
  Software Engineering – 20
  Neuroscience of Learning, Memory and Cognition – 18.1
  Linear Algebra – 19.1
  Probability and Statistics – 19
  Data Structures and Algorithms – 18
  Database – 18.8

Academic Experience

B.Sc. Thesis project

Under the supervision of Prof. Seyed-Hasan Mirian-Hosseinabadi.
There exists a variety of coverage criteria for software testing; however, most of these criteria are limited to research environments or systems where safety is critical. The primary reason for this limitation is the complexity of these coverage metrics and the lack of adequate tooling, which makes their adoption costly. Despite their strength, industry practice typically restricts itself to simpler coverage criteria, such as node and edge coverage. In this project, we focus on graph-based and logical coverage criteria, intending to develop a tool that can **(1) automatically extract test requirements for these criteria** *and* **(2) verify that the user's test cases satisfy those requirements.** *The target implementation language for this project is Python, and the intended development environment is the PyCharm IDE. My role in this project is to conduct a study, implement the extraction tool, and develop the monitoring tool that validates user-provided test cases against* **logical coverage requirements.**

Teacher Assistant

Sharif University of Technology

Software Engineering	Feb 2024 – June 2024, Oct 2025 – Feb 2025
Probability and Statistics	Feb 2024 – June 2024
Database	Feb 2024 – June 2024

Work Experience

Bitpin
Software Engineer   Oct 2024 – Ongoing

Yektanet
Software Engineer   June 2023 – June 2024

Mofid Securities
Junior Software Engineer   Feb 2022 – Oct 2022

Projects

NLMC
Familiarity with Neuroscience.

EFRM
The EigenFaces Recognition Model (EFRM) is a lightweight facial recognition model that processes images with this intention using EigenFaces and PCA

MLP
Use of residual CNN in the MNIST dataset to train a digit classification model using Pytorch.

Raxi
Implementing RL for a Taxi Driver.

CartPole
Implementation of various RL concepts in the CartPole problem, using the Gym library in Python

NTGC
Netflix taste graph clustering (NTGC)

Check out my GitHub for other projects

Skills

Languages: Persian (mother tongue), English (4/5).

Programming Languages: `Python, Golang, Java, Kotlin, C & C++`

Data Frameworks: `PyTorch, TensorFlow & Keras, Gym, Pandas, Numpy`

Tools: `Kubernetes, Docker, Kafka, Redis, Postgres DB & Clickhouse DB, HDFS, Spark`