

Farane Jalali Farahani

RESEARCH AND TEACHING ASSISTANT · ARTIFICIAL INTELLIGENCE

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Education

Sharif University of Technology

M.S. IN COMPUTER ENGINEERING - ARTIFICIAL INTELLIGENCE

Tehran, Iran

Sep. 2018 - Sep. 2020

- GPA: 3.7 / 4
- Thesis: Persian Named Entity Recognition, Supervisor: Gholamreza Ghassem-Sani

Iran University of Science and Technology

B.S. IN COMPUTER ENGINEERING - HARDWARE ENGINEERING

Tehran, Iran

Sep. 2012 - Feb. 2017

- GPA: 3.05 / 4
- Thesis: Implementation of Smart Irrigation System in IoT, Supervisor: Morteza Analoui

Areas of Expertise

- Machine learning and Deep learning
- Natural Language Processing
- Information Extraction
- Computational Social Science

Skills

Programming Languages	Python, MATLAB, Verilog, C++, HTML, CSS, JavaScript, Prolog, Assembly
Machine Learning Libraries	Numpy, Pandas, Matplotlib
Deep Learning Framework	Pytorch
NLP ToolBox	Pytorch-transformers
Software	Visual Studio, IntelliJ, Eclipse, Xilinx ISE, LEdit, PSpice, ModelSim
Document Preparation	LaTeX, Microsoft office, Prezi
Data Analysis Tools	Jupyter Notebook
Language	English (Fluent), Farsi (Native), Arabic (Basic), German (Basic)

Experience

University of Stuttgart, Institute for AI

RESEARCH AND TEACHING ASSISTANT

Stuttgart, Germany

Oct. 2022 – Present

- Designed and implemented solutions for social media fairness in the IRIS3D project (IRIS3D Project).
- Teaching Assistant for the Machine Learning course (Summer Semester 2024): delivered lectures, designed exams, and managed grading.
- Conducted a seminar on social media bias for 15 undergraduate students, fostering critical thinking and discussion.

Max Planck Institute for Informatics

NATURAL LANGUAGE PROCESSING INTERN

Saarbrücken, Germany

May 2021 – Present

- Supervised by Gerhard Weikum, Andrew Yates, and Paramita Mirza.
- Improved neural language models for information extraction tasks.

Iran Telecommunication Research Center

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Tehran, Iran

Jun. 2015 – Oct. 2015

- Supervised by Nasser Mozayani and Farzad Ebrahimi.
- Implemented smart lighting using Raspberry Pi and designed an Android application.

Sharif University of Technology, Computer Engineering Department

RESEARCH AND TEACHING ASSISTANT

Tehran, Iran

Sept. 2018 – Sept. 2020, Fall 2019, Spring

2019

- Research Assistant at NLP Lab supervised by Gholamreza Ghassem-Sani: Combined transfer learning and active learning methods for Persian NER.
- Teaching Assistant for *Stochastic Processes in Bioinformatics* (CE556), Instructor: Mohammad Hossein Rohban: Teaching, managing assignments, and grading quizzes.
- Teaching Assistant for *Artificial Intelligence* (CE417, Group 1), Instructor: Mohammad Hossein Rohban: Managed assignments.
- Teaching Assistant for *Artificial Intelligence* (CE417, Group 2), Instructor: Mahdieh Soleymani: Graded quizzes.

- Course: *Introduction to Computer Programming (C++)*.
- Instructor: M. Reza Torkashvan.
- Responsibilities: Teaching and managing assignments.

Honors & Awards

- Ranked **12th** among more than 19,000 participants in Master Entrance Exam of 2018 in computer engineering.
- Awarded full scholarship from **Sharif University of Technology (SUT)** in computer engineering.
- I Ranked **80th** among more than 15,000 participants in Master Entrance Exam of 2018 in Information Technology
- Ranked top **1%** among more than 30,000 participants in National University Entrance Exam of 2012.
- Awarded full scholarship from **Iran University of Science and Technology (IUST)** in computer engineering.

Publications

BERT-PersNER: a New Model for Persian Named Entity Recognition

PROCEEDINGS OF RECENT ADVANCES IN NATURAL LANGUAGE PROCESSING, 1-3 SEPTEMBER 2021, VARNA, BULGARIA

- Authors: Farane Jalali Farahani, Gholamreza Ghassem-Sani

Who is targeted? Detecting social group mentions in online political discussions

WEBSCI'24: 16TH ACM WEB SCIENCE CONFERENCE, MAY 21 - 24 2024, STUTTGART, GERMANY

- Authors: Farane Jalali Farahani, Sara Hanke, Raphael Heiberger, Steffen Staab

Selected Courses

Deep Learning **20/20**, Machine Learning Theory **19.6/20**, Artificial Intelligence Planning **17.8/20**, Artificial Intelligence **19/20**, Signal and Systems **19/20**, Embedded Real-time Systems **20/20**, Digital Electronics **18.33/20**, Engineering Probability and Statistics **18.5/20**, Linear Control Systems **19/20**, VLSI **18.25/20**, Computer Architecture **17.91/20**