POORIYA JAMIE

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Google Scholar: Link | LinkedIn: linkedin.com/in/pooriya-jamie | GitHub: github.com/pooriya-jamie | Website: pooriya-jamie.github.io

Computer Science Enthusiast | Proficient in Machine Learning, Human-Computer Interaction, Computer Science Education, and Algorithm Design | Seeking Graduate Programs

Education

Amirkabir University of Technology (Tehran Polytechnic), *B.Sc. in Computer Science*　　　　　*Sep 2021 - present*

o **GPA: 18.53/20 (3.88/4)**　　|　**Major Subject GPA: 4/4**　　|　**Top 10%**

o **Major Courses**: Computer Programming (20/20)　|　Artificial Intelligence (19.5/20)　|　Data Mining (19.82/20)
Data Structures and Algorithms (19.5/20)　|　Image Processing (20/20)　|　Design & Analysis of Algorithms (20/20)
Linear Optimization (18.6/20)　|　Human-Computer Interaction (in progress)

National Organization for Development of Exceptional Talents (NODET), *Diploma*　　　　　*Sep 2017 - Jan 2021*

Publications

Chauhan, Anishka, Mayur, Pratham, Gokarakonda, Yeshwanth Sai, <u>Jamie, Pooriya</u>, and Mehrotra, Naman. (2024). **"Indian Stock Market Prediction using Augmented Financial Intelligence ML"**. Available at SSRN | DOI

<u>Jamie, Pooriya</u>, Hajihashemi, Reyhaneh, and Alipour, Sharareh. (2024). **"Utilizing ChatGPT in a Data Structures and Algorithms Course: A Teaching Assistant's Perspective"**. SIGCSE TS 2025 (Under review).

Honarmand, Melika, Shandilya, Sahaj, Li, Junzhang, Mayur, Pratham, <u>Jamie, Pooriya</u>, and Treleaven, Philip. (2024, expected). **"Emotion-aware Musical Recommendation System using Contextual Analysis"**. (In preparation).

Research Experience

Research Intern: AI-assisted Assignment Assessment System, *University of Twente*

Under the supervision of Dr. Mohammadreza Farrokhnia　　　　　*Jul 2024 - Present*

- Developing an AI-assisted assignment assessment system that measures how much feedback has been applied in the final assignment.
- Utilized ChatGPT to provide constructive feedback to students and improve areas in their assignments.

Research Assistant: Deep Learning Approaches for Imbalanced Data in Fraud Detection, *Tehran Polytechnic*

Under the supervision of Prof. Mehdi Ghatee and Behnam Yousefimehr　　　　　*Feb 2024 - Present*

- Exploring various deep learning architectures, such as CNNs, RNNs, and GANs, to handle imbalanced datasets in fraud detection tasks.

Research Assistant: ChatGPT's Impact on Education, *Tehran Institute for Advanced Studies (TeIAS)*

Under the supervision of Dr. Sharareh Alipour　　　　　*Oct 2023 - Jul 2024*

- Analyzed the potential of ChatGPT in research and teaching domains, focusing on its influence on educational practices.
- Conducted studies, including surveys and interviews, to understand ChatGPT's adoption and utilization by educators.

Research Assistant: Emotion-aware Musical Recommendation System, *University College London (UCL)*

Under the supervision of Prof. Philip Treleaven　　　　　*Dec 2023 - Apr 2024*

- Developed a novel music recommendation system using contextual analysis of song lyrics.
- Focused on extracting sentiment-rich summaries from song lyrics using a combination of unsupervised and supervised techniques, including Text-Ranking, Bert-Extractive-Summarizer, and GPT-3.5 insights.

Research Intern: Augmented Financial Intelligence Project, *University College London (UCL)*

Under the supervision of Prof. Philip Treleaven　　　　　*Jan 2023 - Dec 2023*

- Enhanced machine learning infrastructure and led literature review.
- Developed a platform for forecasting financial trends in the Indian market using machine learning techniques.

Research Interests

- Computer Science Education　|　LLMs in Education　|　Learning Analytics　|　Learning Sciences　|　AI in Education
Educational Technology　|　Educational Data Mining　|　Educational Equity
- Artificial Intelligence　|　Machine Learning　|　Deep Learning　|　Computer Vision　|　Image Processing
- Human-Computer Interaction　|　Human-AI interaction　|　User Experience (UX) Design

Teaching Assistant Experience

Data Structures and Algorithms Head	*Tehran Polytechnic and Sharif University, Feb 2024 - Jun 2024*
Numerical Calculations	*Tehran Polytechnic, Feb 2024 - Jun 2024*
Foundation of Numerical Analysis	*Tehran Polytechnic, Feb 2024 - Jun 2024*
Algorithmic Game Theory	*Sharif University of Technology and TeIAS, Jan 2024 - Jun 2024*
Principles and Techniques in Data Science	*Sharif University of Technology, Jan 2024 - May 2024*
Data Mining	*Tehran Polytechnic, Oct 2023 - Jan 2024*
Data Structures and Algorithms Head	*Tehran Polytechnic, Oct 2023 - Jan 2024*
Linear Algebra	*Sharif University of Technology, Oct 2023 - Nov 2023*
Algorithmic creativity and Python programming	*Sharif University of Technology, Jul 2023 - Sep 2023*
Data Structures and Algorithms	*Tehran Polytechnic, Feb 2023 - Jul 2023*
Foundation of Combinatorics	*Tehran Polytechnic, Feb 2023 - Jul 2023*
Introduction to Computer and Programming	*Tehran Polytechnic, Oct 2022 - Jan 2023*
Advanced Programming & Workshop	*Tehran Polytechnic, Sep 2022 - Jan 2023*

Other Experiences

Tester and Mentor of Short Courses　　　　　　　　　　　　　　　　*DeepLearning.AI, Aug 2023 - Jan 2024*
- o Took on the role of testing and mentoring for short courses, ensuring quality, effectiveness, and supporting participants' learning process.

Data Science Bootcamp　　　　　　　　　　　　　　　　　　　　　*Quera, Aug 2023 - Nov 2023*
- o Participated in a 12-week intensive data science program covering topics such as Data Analysis, Machine Learning, Data Visualization, Data Mining, Deep Learning, Power BI, SQL, NLP, and Soft Skills. Completed industry-relevant projects for practical experience.

Mentor of AI For Everyone Course　　　　　　　　　　　　　　　　*DeepLearning.AI, Oct 2022 - Aug 2023*
- o I try to answer learners' questions about different fields of artificial intelligence in discourse at the DeepLearning.AI website.

Programming Contest Coordinator　　　　　　　　　　　　　　　　*Tehran Polytechnic*
- o Designed algorithm and mathematical programming questions for a competition with 600+ participants.

Practical Skills

Machine Learning libraries:	TensorFlow, PyTorch, scikit-learn
Computer Vision libraries:	OpenCV
Data analysis libraries:	NumPy, Pandas
Data visualization libraries:	Matplotlib, Seaborn
Deep Learning frameworks:	Keras
Programming languages:	Python, C, C++, R
Web Development:	HTML, CSS, WordPress
Soft Skills:	Communication, Teamwork and Collaboration, Persistent and Curious

Certifications

TASK-ORIENTED BOOTCAMP IN DATA SCIENCE	*Quera, Nov 2023*
Unsupervised Learning, Recommenders, Reinforcement Learning	*Coursera, DeepLearning.AI, Stanford University, Aug 2023*
Advanced Learning Algorithms	*Coursera, DeepLearning.AI, Stanford University, Jul 2023*
Linear Algebra For Machine Learning and Data Science	*Coursera, DeepLearning.AI, Stanford University, Mar 2023*
Python for Data Science	*Uplimit, Mar 2023*
Mathematics for Machine Learning: Linear Algebra	*Coursera, Imperial College London, Nov 2022*
Supervised Machine Learning: Regression and Classification	*Coursera, DeepLearning.AI, Stanford University, Nov 2022*
AI For Everyone	*Coursera, DeepLearning.AI, Sep 2022*
Improve Your English Communication Skills Specializations	*Coursera, Georgia Institute of Technology, Aug 2022*
Introduction to User Experience Design	*Coursera, Georgia Institute of Technology, Feb 2022*
Advanced Algorithmic thinking and Data structure	*Quera, Jun 2020*
Fundamental of C++ programming and algorithm thinking	*Quera, May 2020*

Languages

Persian: Native proficiency

English: Professional working proficiency (TOEFL exam registered for October 19, 2024)