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, Data Science, Algorithm Theory, and HCI | Seeking Internship/Research Assistant Opportunity

Education

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

- o GPA: 18.5/20 (Major Subject GPA: 4/4, Top 10%)

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

Publications

Published

Chauhan, Anishka, Mayur, Pratham, Gokarakonda, Yeshwanth Sai, Jamie, Pooriya, and Mehrotra, Naman. **"Indian Stock Market Prediction using Augmented Financial Intelligence ML"** (January 17, 2024). Available at SSRN: SSRN | DOI

Forthcoming

Music with AI: Contextual Feeling-Based Music Recommender (forthcoming).

- Manuscript prepared; author list to be finalized.

Using ChatGPT in Data Structure Courses: Teaching Assistant Perspective (forthcoming).

- Manuscript for submission to The 56th ACM Technical Symposium on Computer Science Education.

Research Experience

- Amirkabir University of Technology (Tehran Polytechnic)
  - o **Research Assistant: Deep Learning Approaches for Imbalanced Data in Fraud Detection**   *Feb 2023 - Present*
    - Currently working as an RA in the NORC Lab, supervised by Prof. Mehdi Ghatee and Behnam Yousefimehr
    - Exploring various deep learning architectures, such as CNNs, RNNs, and GANs, to handle imbalanced datasets in fraud detection tasks.
- Tehran Institute for Advanced Studies (TeIAS)
  - o **Researcher in Human-Computer Interaction (HCI): ChatGPT's Impact on Education**   *Oct 2023 - Present*
    - Working under the supervision of Dr. Sharareh Alipour, exploring the future potential of ChatGPT in research and teaching domains, analyzing its influence on individuals' lives and the transformation of practices in these fields.
    - Conducting comprehensive studies, including surveys, interviews, and experiments, to understand how ChatGPT is adopted and utilized by researchers and educators.
- University College London (UCL)
  - o **Remote Internship: Augmented Financial Intelligence Project**   *Jan 2023 – Dec 2023*
    - Under Prof. Philip Treleaven's supervision, I collaborated on a team to develop a robust platform for forecasting long-term financial trends in the Indian market using diverse machine learning techniques.
    - I played a key role in enhancing the platform's machine learning infrastructure, focusing on tasks like data preprocessing, algorithm selection, and model training.
    - Regularly communicated progress, results, and challenges to team members and stakeholders.
    - Led the literature review section of the paper, analyzing existing research and summarizing machine learning aspects

Teaching Experience

- **Data Structures and Algorithms Head**   *Tehran Polytechnic and Sharif University, Feb 2024 - Present*
  - o Under the supervision of Dr. Sajad Shirali-Shahreza
- **Numerical Calculations**   *Tehran Polytechnic, Feb 2024 - Present*
  - o Under the supervision of Dr. Mostafa Abbaszadeh

- **Foundation of Numerical Analysis** *Tehran Polytechnic, Feb 2024 - Present*
  - o Under the supervision of Dr. Mostafa Shamsi
- **Data Structures and Algorithms** *Sharif University of Technology, Feb 2024 - Present*
  - o Under the supervision of Dr. Mohammad Ali Abam and Hussein Kazemi
- **Algorithmic Game Theory** *Sharif University of Technology and TeIAS, Jan 2024 - Present*
  - o Under the supervision of Dr. Masoud Seddighin
- **Principles and Techniques in Data Science** *Sharif University of Technology, Jan 2024 - Present*
  - o Under the supervision of Dr. MohammadAmin Fazli
- **Data Mining** *Tehran Polytechnic, Oct 2023 - Jan 2024*
  - o Under the supervision of Dr. Maryam Amirmazlaghani
- **Data Structures and Algorithms Head** *Tehran Polytechnic, Oct 2023 - Jan 2024*
  - o Under the supervision of Dr. Sajad Shirali-Shahreza
- **Linear Algebra** *Sharif University of Technology, Oct 2023 - Nov 2023*
  - o Under the supervision of Dr. Ali Sharifi-Zarchi
- **Algorithmic creativity and Python programming** *Sharif University of Technology, Jul 2023 - Sep 2023*
  - o Under the supervision of Dr. Ali Sharifi-Zarchi
- **Data Structures and Algorithms** *Tehran Polytechnic, Feb 2023 - Jul 2023*
  - o Under the supervision of Dr. Sajad Shirali-Shahreza
- **Foundation of Combinatorics** *Tehran Polytechnic, Feb 2023 - Jul 2023*
  - o Under the supervision of Dr. Zeinab Akhlaghi
- **Introduction to Computer and Programming** *Tehran Polytechnic, Oct 2022 - Jan 2023*
  - o Under the supervision of Dr. Mohammad Akbari
- **Advanced Programming & Workshop** *Tehran Polytechnic, Sep 2022 - Jan 2023*
  - o Under the supervision of Dr. Mohammad Mahdi Bejani

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.

Research Interests

- Machine learning (including deep learning, reinforcement learning, and unsupervised learning)
- Computer Vision and Image Processing
- Artificial Intelligence
- Data mining and Data Science Applications
- LLMs in Education
- Human-computer interaction (HCI) and Human-AI interaction
- Foundational Models
- Algorithm Design and Analysis
- Machine Learning for Education
- Graph Machine Learning
- Learning Analytics

Skills

- Analytical Problem-solving
- Machine Learning Algorithms
- Human-Computer Interaction (HCI)
- Deep Learning Techniques

- Data Preprocessing and Visualization
- Data Mining Techniques
- NLP techniques
- Web Development
- LLM Techniques
- Persistent and Curious
- Communication Skills
- Teamwork and Collaboration

Practical Skills

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

Major Courses (GPA 4/4)

- Introduction to Computer and Programming (20/20)
- Principles of Computer Systems (19.5/20)
- Data Structures and Algorithms (19.5/20)
- Linear Optimization (18.6/20)
- Data Mining (19.82/20)
- Theoretical Fundamentals of Calculation (19.5/20)
- Design & Analysis of Algorithms (20/20)
- Artificial Intelligence and Workshop (19.5/20)
- Topics in Mathematics and Its Applications: Image Processing (20/20)
- Foundation of Numerical Analysis (20/20)
- Principles of Operating Systems (In Process)
- Topics in Computer Science: Neural Networks and Introduction to Deep Learning (In Process)

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

Reference

1. Dr. Sajad Shirali-shahreza
   Assistant Professor of Computer Engineering
   Institution: Amirkabir University of Technology (AUT)
   Email: shirali@aut.ac.ir