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ALI ZEYNALI

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EDUCATION

MS / PhD of Computer Science, University of Massachusetts Amherst - GPA: 4.0/4.0 2019 - Present

Bachelor of Science in Computer Engineering, Sharif Universiyt of Technology 2014 - 2019

INTERESTS

Online deicision making, Trustworthy machine learning

WORK EXPERIENCE

Machine Learning Data Scientist Intern - SiriusXM and Pandora - Oakland Jun 2024- Aug 2024

- Developed a framework to explain the similarity of a query and a document retrieved by a search ranking model.
- Enhanced the performance of previous models up to 26% with the final implementation.
- Skills: NLP, LLM, Attention based Models, Search.

Software Enineering Intern - Google LLC. - Mountain View Jan 2022- May 2022

- Developed a highly accurate model to address the interest matching points problem.
- Enhanced the performance of previous models up to 50% with the final implementation.
- Skills: Deep Learning, Computer Vision, Image Processing, Tensorflow.

Data Science and Machine Learning Research Intern - Adobe Inc. - San Jose May 2021- Aug 2021

- Enhanced streaming model of Adobe liquid-mode PDF, ensuring seamless performance in offline/online.
- Improved quality of experience and wasted bandwidth both up to 20% with the final model.
- Skills: Prediction Models, Online Decision Making, Data Analysis, Statistics.

Data Scientist Intern - Nullatech (start-up company) May 2017- Nov 2017

Science Olympiad Tutor and Program Manager - National Young Scholar Club Jan 2014- Aug 2018

SKILLS

Machine Learning	Deep neural networks, Reinforcement learning, Statistical data analysis
Programming Languages	Python, Java, C++, C#
Deep Learning	PyTorch, Tensorflow, Keras, ONNX
Data Analysis	Data visualization, Numpy, Pandas, Scikit-learn, SciPy, Gurobi, CVXPY
Development Tools	Git, SQL, mySQL, PostgreSQL, Docker
Web Development	Django, HTML, CSS
Additional Skills	AWS, SageMaker, Jupyter notebook, Object oriented programming, LaTeX

SELECTED PROJECTS

VSE360: Online 360-degree video streaming simulation evironment
Fully simulated Python environment to evaluate 360-degree video bitrate control algorithms. [Github]

AI-Generated music using Deep Learning + LSTM
Generating music using deep learning techniques, and LSTM networks. [Github]

AI-Generated short stories using bidirectional LSTM
Generating short/tiny stories with deep LSTM. [Github]

ZeySed: Deep neural networks for leave classification
Classifying image of leaves using deep neural networks. [Github]

SELECTED PUBLICATIONS

- **Under review** ***Ali Zeynali**, Mahsa Sahebdel, Noman Bashir, Ramesh K. Sitaraman, Mohammad H. Hajiesmaili; **Near-Optimal Emission-Aware Online Ride Assignment Algorithm for Peak Demand Hours**;*

- **Under review** *Mahsa Sahebdel, **Ali Zeynali**, Noman Bashir, Prashant Shenoy, Mohammad H. Hajiesmaili; **LEAD: Towards Learning-Based Equity-Aware Decarbonization in Ridesharing Platforms**;*

- **Published** ***Ali Zeynali**, Shahin Kamali, Mohammad H. Hajiesmaili; **Robust Learning-Augmented Dictionaries**; ICML; 2024*

- **Published** *Mahsa Sahebdel, **Ali Zeynali**, Noman Bashir, Prashant Shenoy, Mohammad H. Hajiesmaili; **A Holistic Approach for Equity-aware Carbon Reduction of Ridesharing Platforms**; ACM e-Energy; 2024*

- **Published** ***Ali Zeynali**, Mohammad H. Hajiesmaili, Ramesh K. Sitaraman; **BOLA360: Near-optimal View and Bitrate Adaptation for 360-degree Video Streaming**; ACM Multimedia Systems; 2024*

- **Published** *Mahsa Sahebdel, **Ali Zeynali**, Noman Bashir, Mohammad H. Hajiesmaili, Jimi Oke; **Poster: Data-driven Algorithms for Reducing the Carbon Footprint of Ride-sharing Ecosystems**; ACM e-Energy; 2023*

- **Published** *Xi Chen, **Ali Zeynali**, Chico Camargo, Fabian Flock, Devin Gaffney, Przemyslaw Grabowicz, Scott Hale, David Jurgens, Mattia Samory; **SemEval-2022 Task 8: Multilingual news article similarity**; 16th International Workshop on Semantic Evaluation (SemEval); 2022*

- **Published** *Lin Yang, **Ali Zeynali**, Mohammad H. Hajiesmaili, Ramesh K. Sitaraman, Don Towsley; **Competitive Algorithms for Online Multidimensional Knapsack Problems**; ACM Sigmetrics; 2022*

- **Published** ***Ali Zeynali**, Bo Sun, Mohammad H. Hajiesmaili, Adam Wierman; **Data-driven Competitive Algorithms for Online Knapsack and Set Cover**; AAAI; 2021*

- **Published** *Bo Sun, **Ali Zeynali**, Tongxin Li, Mohammad H. Hajiesmaili, Adam Wierman, Danny HK Tsang; **Competitive Algorithms for the Online Multiple Knapsack Problem with Application to Electric Vehicle Charging**; ACM Sigmetrics; 2021*

HONORS AND AWARDS

Winner of Thesis Defense Fellowship Award Fall 2024
University of Massachusetts, Amherst

Winner of Thesis Proposal Fellowship Award Fall 2023
University of Massachusetts, Amherst

Nominated for the Microsoft Research Fellowship by the CICS Department Summer 2021
University of Massachusetts, Amherst

Recipient of Donald F. Towsley Graduate Scholarship Summer 2021
University of Massachusetts, Amherst

Selected in Top-Ten (among 177) B.Sc. students of computer engineering department Summer 2019

Ranked 24^{th} among 1823 teams in 10^{th} IEEEXTREME, 24^h programming contest Fall 2016

Golden Medalist of 8^{th} International Olympiad IOAA in Romania Summer 2014
Among more than 200 international students

Golden Medalist of 9th National Science Olympiad NOAA Summer 2013
Among more than 5,000 students