RUSSELL LEE

rclee@cs.umass.edu
Amherst, MA

Education

University of Massachusetts Amherst, Amherst, MA — May 2020 - present
PhD Candidate in Computer Science

M.S. in Computer Science — May 2020
GPA: 3.82/4.0

Carnegie Mellon University, Pittsburgh, PA — May 2017
B.S. in Mathematical Sciences

Research Experience

Graduate Research Assistant, University of Massachusetts Amherst — May 2019 - present
Professor Mohammad Hajiesmaili, College of Information and Computer Sciences

- Developed competitive online algorithms for **energy scheduling and data center optimization**
- Analyzed optimal usage of **data-driven machine learning predictions in robust algorithm design**
- Demonstrated **theoretical and empirical improvement** of novel algorithms when **utilizing machine learning data**
- Implemented **online learning** techniques for **hyperparameter tuning**

This work resulted in 3 conference publications in ACM-eEnergy, Performance, and NIPS.

Research Scientist Intern, Sikka Software, San Jose CA — May - August 2018

- Developed **online scheduling** algorithm for optimal appointment booking
- Created Python implementation of probabilistic model for scheduling based on historical appointment data

Conference Publications

Bo Sun, **Russell Lee**, Mohammad H, Hajiesmaili, Adam Wierman, and Danny Tsang, "Pareto-Optimal Learning-Augmented Algorithms for Online Conversion Problems", *in Proc. of NeurIPS*, 2021. — 2021

Russell Lee, Yutao Zhou, Lin Yang, Mohammad H. Hajiesmaili, and Ramesh Sitaraman, "Competitive Bidding Strategies for Online Linear Optimization with Inventory Management Constraints", *in Proc. of IFIP Performance* 2021. — 2021

Russell Lee, Jessica Maghakian, Mohammad H. Hajiesmaili, Jian Li, Ramesh Sitaraman, and Zhenhua Liu, "Online Peak-aware Energy Scheduling with Untrusted Advice," *in Proc. of ACM eEnergy*, 2021. **(Best Paper Candidate)** — 2021

Teaching Experience

College of Information and Computer Sciences, University of Massachusetts Amherst — 2017-2018
Teaching Assistant, Introduction to Algorithms CS311, Undergraduate Course

Teaching Assistant, Machine Learning CS589, Graduate Course — 2018-2019

Programming Skills

Python, R, MATLAB

Awards and Honors

Senior Leadership Award, Carnegie Mellon University — May 2017
Awarded for significant leadership contribution to campus community