RUSSELL LEE

rclee@cs.umass.edu
Amherst, MA

Education

University of Massachusetts Amherst, Amherst, MA — 2017-present
M.S. in Computer Science, PhD Candidate in Computer Science, GPA: 3.84/4.0

Carnegie Mellon University, B.S. in Mathematical Sciences — 2013-2017
Honors: Dean's List, University Honors, GPA: 3.69/4.0

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 **machine learning predictions in 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, IFIP Performance, and NeurIPS.

Summer Research Scientist Intern, Sikka Software, San Jose CA

- Created Python implementation of **probabilistic model** for scheduling based on **historical appointment data** — 2018

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

Presentations

Online Peak-aware Energy Scheduling with Untrusted Advice

- INFORMS Annual Meeting, to appear October 2023 (**Invited talk**).
- International Conference on Future Energy Systems (ACM e-Energy), June 2021

Teaching Experience

College of Information and Computer Sciences, University of Massachusetts Amherst — 2017-2019

- *Teaching Assistant,* Introduction to Algorithms CS311, Undergraduate Course
- *Teaching Assistant,* Machine Learning CS589, Graduate Course

Programming Skills

Experienced in Python, MATLAB; familiar with R

Awards and Honors

Thesis Proposal Writing Fellowship, University of Massachusetts Amherst — 2023
Senior Leadership Award, Carnegie Mellon University — 2017