Sadie L. Allen

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EDUCATION

Boston University College of Engineering and College of Arts and Sciences Boston, MA
B.S. in Computer Engineering and B.A. in Pure and Applied Mathematics (dual degree program) May 2021
Cumulative GPA: 3.92/4.00 (Dean's list, all semesters)

Boston University College of Engineering Boston, MA
Ph.D. in Computer Engineering Expected May 2026

RELEVANT EXPERIENCE

Danfoss Power Solutions; Danfoss Innovation Accelerator, Data Science Intern, Cambridge, MA **June - December 2021**

- Developed models for data-driven sales opportunity analytics including a binary classification model to predict likelihood of closing a sale, a Cox PH model to estimate time-to-close, and a partial dependency plot-based feature importance to recommend specific actions for sales managers

IBM; TJ Watson Research Center, Research Intern, Yorktown Heights, NY **Summer 2020**

- Collaborated with another intern to design a UI in JavaScript using libraries including D3, Vega, and VegaLite
- Conducted extensive literature survey and fault injection experiments on benchmark applications to gain familiarity with Kubernetes and fault diagnosis in distributed systems

Boston University; PEACLab, Undergraduate Researcher, Boston, MA **Spring 2019 – Spring 2021**

- Worked on Praxi, a tool designed to aid cloud administrators to monitor software present on their systems; Praxi employs a machine learning model to identify applications based on file system changes
- Converted research code to industry-ready modules, primarily coding in Python on Linux virtual machines (VMs)
- Designed hands-on cloud security software tutorial and extended Praxi's capabilities to version detection

OTHER EXPERIENCE

Boston University Department of Electrical and Computer Engineering, Boston MA **August 2019 – Present**
Undergraduate Teaching Assistant for EC330 Applied Algorithms, EC414 Introduction to Machine Learning

PROJECTS

- **Spotimy** website enabling users to filter their playlist according to audio features from the Spotify API
- **ContextCheck** website with BERT-based NLP algorithm fine-tuned to detect bias in news articles
- **Modulo Intelligent and Modular Inventory System** [personal project] that updates content in real-time online at low cost; uses embedded electronics, is easily upgradeable, and can automatically order supplies when low

LEADERSHIP, HONORS & AWARDS

Vice President, Tau Beta Pi Engineering Honor Society, Eta Chapter
Music Director, Chordially Yours **–** A Cappella group at Boston University
BU Claire Boothe Luce Fellowship; Undergraduate Research Opportunity Program Award**;** Honorable Mention: Computing Research Association's Outstanding Undergraduate Researcher Award; Best in Class for Sophomores in BU's Imagineering Competition**;** BU Richard D. Cohen Scholarship (academic scholarship for full tuition)**;** BU's Lutchen Engineering Summer Fellowship.

SKILLS

Computer: C, C++, Java, JavaScript, ReactJS, D3, Vega, Python, R, ROS, GitHub, MATLAB, Linux, RISC-V, Verilog

PUBLICATIONS AND TALKS

- Sadie L. Allen, Mert Toslali, Srinivasan Parthasarathy, Fabio Oliveira, Ayse K. Coskun. Tritium: A Cross-layer Analytics System for Enhancing Microservice Rollouts in the Cloud.
- Anthony Byrne, **Sadie L. Allen**, Shripad Nadgowda, and Ayse K.Coskun. 2019. Demo Abstract: Praxi: Cloud Software Discovery That Learns from Practice. *Middleware '19: International Middleware Conference*, December 8–13, 2019, Davis, CA, USA. ACM, New York, NY, USA, 2 pages.
- Anthony Byrne, **Sadie L. Allen**, Shripad Nadgowda, and Ayse K.Coskun. 2019. Tutorial: Praxi: Cloud Software Discovery That Learns from Practice. In *International Conference on Cloud Engineering*, June 24-27, 2019, Prague, Czech Republic.
- Keller et. al. "Genetic Drivers of Pancreatic Islet Function, *Genetics*, September 2018.

INTERESTS

Running, ice skating, hiking, singing, music production, board games, Latin