**Sadie L. Allen** 38 Ridgemont St. Apt. A, Boston, MA 02134 | 207.691.0031 | sadiela@bu.edu | [saddlepoint18.com](http://saddlepoint18.com/)

**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