

BRIAN WARD

brianmward99@gmail.com · (703)-609-0308

<https://linkedin.com/in/ward-brianm> · <https://github.com/WardBrian>

WORK EXPERIENCE

SOFTWARE ENGINEER, FLATIRON INSTITUTE, SIMONS FOUNDATION

JUNE 2021 – PRESENT

Develop new language features for Stan, a probabilistic programming language. Refactor existing code and collaborate with a large open-source community. Support ongoing scientific research with internal and external collaborators.

MSP INTERN, NASA JET PROPULSION LABORATORY

SEPTEMBER 2020 – JUNE 2021

Develop, test, and deploy a new framework for satellite data analysis with MLS principal investigator Nathaniel Livesey, PhD. Create new tools to track anomalous behavior and confirm consistency of existing datasets.

JUNE 2020 – SEPTEMBER 2020

Work with Leslie Tamppari, PhD to explore feasibility of new Mars orbiter. Develop software to interpret simulated instrument data and compare to model output to assess scientific usefulness. Co-author of forthcoming paper on the proposed instrument.

TEACHING ASSISTANT, BOSTON COLLEGE COMPUTER SCIENCE DEPARTMENT

AUGUST 2019 – MAY 2021

Evaluate student work throughout the semester. Educate students on technical and conceptual content. Staff and monitor university computer lab.

SENIOR TECHNICIAN AND DESIGNER, ROBSHAM THEATRE ARTS CENTER

SEPTEMBER 2017 – MA 2021

Supervise event operations. Develop and implement standards for the programming, operation, and broadcast of shows. Create software and hardware solutions for venue-specific problems.

EDUCATION

B.A. – COMPUTER SCIENCE AND THEATRE, BOSTON COLLEGE (MAY 2021)

Summa Cum Laude, Phi Beta Kappa Member (Elected as a Junior, April 2020)

3.981 Cumulative GPA. 2019 Sophomore Scholar, 2020 Dean's Scholar

Significant Courses: Programming Languages, Computability and Complexity, and Compilers.

Honors Thesis Title: A Validated Parser for Stan

SKILLS

- Extensive experience in group and collaborative environments in several disciplines
- Proficient in Microsoft Office and GSuite
- Programming Languages: **Java**, **Python**, **OCaml**, **Coq**, **C**, **Lisp** (several), **C++**, and **LUA**
- Extensive experience with **LaTeX** and **Git**

ACTIVITIES

- Developed and maintained several personal software projects over the last **8 years**, including several public projects downloaded **over 3.2 million times** in aggregate.
- Designed lighting or assisted for **over a dozen shows** of various disciplines over the past 5 years.
- Participated on **student panel** for new faculty selection in the Computer Science Department.
- Participated in **Appa**, an annual alternative spring break service trip, for 3 years.