

# Charlie Gagnon

chgagnon.github.io ♦ github.com/chgagnon ♦ (508) 654 5359 ♦ charles\_gagnon@alumni.brown.edu

## EDUCATION

---

### Brown University

Sc.B. – Computer Science, *magna cum laude*

September 2018 - May 2022

Providence, RI

### Natick High School

September 2014 - June 2018

Natick, MA

## WORK EXPERIENCE

---

### EDG Engineer

MathWorks

July 2022 - Present

- While working in the **HDL Coder** team, implemented timing-slack calculations and multiple path analysis for pre-synthesis critical path estimation on hardware models designed in Simulink.
- As part of the **SIT Plan** team, authored and maintained internal training materials used by hundreds of new hires worldwide for learning about MathWorks server products and workflows.
- As part of the **DTA Support** team, provided direct support via email and phone to customers using external language interfaces, external hardware, and server products.

### Software Engineering Intern

MathWorks

May 2021 - September 2021

- While working in the **Cloud Platform** team, developed a log anomaly detection and remediation system for Kubernetes apps, coordinating Fluent Bit, Elasticsearch, and AWS Lambda to discard unwanted logs.

### Virtual Student Intern

National Park Service - South Florida / Caribbean Network

September 2020 - May 2021

- Designed computer vision system to classify and count colonial nesting birds in Biscayne National Park.
- Team of 3 selected as **Team Project of the Year, 2021**, from a pool of more than 3,000 interns.

### Undergraduate Teaching Assistant

Brown University Computer Science Department

August 2020 - May 2022

- Guided students at weekly code and conceptual hours, responded to student questions on course forum page, and revised assignments and solution code.
- Courses supported: Operating Systems (Spring 2022), Programming Language Design (Fall 2021), Intro to C and Computer Systems (Fall 2020).

### Math and Physics Tutor

Brown University Sheridan Center

October 2019 - May 2022

- Prepared and delivered weekly lessons for multiple groups of five students.
- Courses tutored: Probability and Statistics (Summer 2020 - Spring 2022), Introductory Mechanics (Spring 2020), and Multivariable Calculus (Fall 2019).

## SKILLS & SELECTED COURSEWORK

---

- C · C++ · Rust · Python · Java · Verilog
- Operating Systems · Networks · Architecture
- Compilers · Programming Languages
- Machine Learning · Computer Vision · Graphics
- Complex Analysis · Abstract Algebra
- Modern Statistics (Information Theory, Learning Theory, Graphical Models)

## ENGAGEMENT & AWARDS

---

### Brown University Band

Vice President

Nov. 2019 - Nov. 2020

- Set performance schedule and prepared marching forms for field and ice shows.
- Acted as primary contact between Brown Athletics and the Band.

### National Merit Scholar

May 2018

### MA Speech & Debate State Champion

Student Congress

April 2017