

# Charlie Gagnon

[chgagnon.github.io](https://chgagnon.github.io) ♦ [github.com/chgagnon](https://github.com/chgagnon) ♦ (508) 654 5359 ♦ [charles\\_gagnon@brown.edu](mailto:charles_gagnon@brown.edu)

## EDUCATION

---

### Brown University

*Sc.B. – Computer Science*

September 2018 - May 2022

*Providence, RI*

### Natick High School

September 2014 - June 2018

*Natick, MA*

## WORK EXPERIENCE

---

### Software Engineering Intern

*MathWorks Engineering Development Group*

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.
- While working in the **Parallel Code Generation** team, contributed to internal type system conversion for MATLAB/Simulink Coder, which generates human-readable C and C++ code from MATLAB source and graphical model specifications.

### Virtual Student Intern

*National Park Service - South Florida / Caribbean Network*

September 2020 - Present

- Designing 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 - Present

- Fall 2021: Design and Implementation of Programming Languages (CS 173)
- Fall 2020: Intro to Computer Systems (CS 33)
- Guides students at weekly code and conceptual hours, responds to student questions on course forum page, and revises assignments and solution code.

### Math and Physics Tutor

*Brown University Sheridan Center*

October 2019 - Present

- Prepares and delivers weekly lessons for multiple groups of five students.
- Courses tutored: Probability and Statistics (Fall 2021, Spring 2021, Fall 2020, Summer 2020), Introductory Mechanics (Spring 2020), and Multivariable Calculus (Fall 2019).

## SKILLS & SELECTED COURSEWORK

---

## ENGAGEMENT & AWARDS

---

- C · C++ · Python (NumPy, Pandas, TensorFlow)
- Java · OCaml · JavaScript · AWS/GCP · French
- Operating Systems · Software Security
- Compilers · Programming Languages
- Prescriptive Analytics (SAT, CP, LP, IP, Local Search)
- Machine Learning · Computer Vision · Graphics
- Algorithms · Complex Analysis · Abstract Algebra

### 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