Charlie Gagnon

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EDUCATION

Brown University September 2018 - May 2022
Sc.B. – Computer Science, *magna cum laude* *Providence, RI*

Natick High School September 2014 - June 2018
Natick, MA

WORK EXPERIENCE

EDG Engineer July 2022 - Present
MathWorks

· 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 May 2021 - September 2021
MathWorks

· 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 September 2020 - May 2021
National Park Service - South Florida / Caribbean Network

· 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 August 2020 - May 2022
Brown University Computer Science Department

· 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 October 2019 - May 2022
Brown University Sheridan Center

· 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