

Caroline Kaufman

EDUCATION

Tufts University, Medford, MA — Expected graduation May 2020

B.S. Computer Science, B.A. French

Spring 2019: IAU College, Aix-en-Provence, France — Diplôme de Français Professionnel avec Mention

Relevant Courses: Computation Theory, Operating Systems, Programming Languages, Data Visualization, Distributed Systems, Algorithms, Machine Structures and Assembly Language, Discrete Math, Data Structures, Web Programming

Bryn Mawr School, Baltimore, MD — June 2016

SOFTWARE ENGINEERING EXPERIENCE

Software Engineering Intern — Apple, Inc. (iOS Safari)

May - August 2019

- Planned and implemented a self-directed intern project to bring a feature of iOS Safari AutoFill to Mac, working across both platforms to achieve feature parity and improve cross-platform user experience
- Presented to team members and stakeholders within Internet Technologies division

Technologies: Objective-C, C++, Xcode, Git

Software Engineering Intern — Braintree (PayPal)

June - August 2018

- Built and expanded an internal application for risk detection (Rails/PostgreSQL) with a team of engineers, practicing strict test-driven development and pair programming
- Ported application to Kubernetes, decreasing production deployment times by 80%
- Expanded underlying data pipeline to source data from new regions

Technologies: Ruby on Rails, PostgreSQL, Kubernetes, Docker, JIRA, Jenkins, Git

Project Manager — Tufts JumboCode (Central Massachusetts STEM Network)

August - December 2018

- Led a team of nine students in designing and developing a web application (React/Ruby on Rails) for a nonprofit focused on STEM education
- Directed task management, led design of internal data representation and architecture, mentored developers, maintained internal documentation

Technologies: Ruby on Rails, React, Heroku, Git, ZenHub (project management)

COMPUTER SCIENCE TEACHING EXPERIENCE

Teaching Fellow (previously TA) — Tufts Department of Computer Science

September 2017 - Present

- Lead, train, and mentor a team of 30+ teaching assistants and assist with course administration and managing staff
- Design new projects and lab assignments, and develop specifications and reference implementations
- Teach weekly lab sessions, hold office hours to strengthen students' problem-solving skills, and grade student work

Data Structures (TA S18, TF F19), Intro to CS (TA F17, TF F18), Distributed Systems (TA F19)

Summer Immersion Program Teaching Assistant — Girls Who Code

June - August 2017

- Taught 8-week introductory coding curriculum, covering the topics like web development, UX/UI, and cybersecurity
- Mentored a class of 20 high school students for college and career readiness

SKILLS

Programming Experience: C/C++, Objective-C, Ruby on Rails, Python, PostgreSQL, HTML/CSS/JavaScript

Technologies: Kubernetes, Git, Xcode, Valgrind, Linux/UNIX, Docker

PROJECTS

RPC: Python program that generates C++ stubs and proxies for remote procedure calls from a header file

File Copy: C++ program that copies files in packets across a network and recovers from dropped or reordered packets

Universal Machine: Emulator for a virtual machine written in C and optimized to be 10x faster using profiling tools

LEADERSHIP EXPERIENCE AND VOLUNTEER WORK

Tufts Computer Science Student Council | Peer Health Exchange Leadership Council | Tufts FOCUS Orientation