**Education**

**HARVARD UNIVERSITY** Cambridge, MA

B.S. Electrical Engineering. Minor in Computer Science. GPA 3.8 May 2021

Relevant Coursework: Big Data Systems (grad) • Advanced Computer Networks (grad) • Operating Systems • Systems Programming and Machine Organization • Machine Learning • Probability • Discrete Math for CS • Linear Algebra • Multivariable Calculus • Signals and Systems • Feedback and Control • Circuits and Electronics • Quantum Physics • Econometrics.

**ISTITUTO LEONE XIII** Milan, Italy

High School diploma in Classics. Final grade 100/100 July 2017

Main Coursework: Ancient Greek, Latin, History, Philosophy, Literature

**VASHON ISLAND HIGH SCHOOL** Seattle Area, WA

Exchange Student. GPA 4.0 Sept. 2015 – July 2016

SAT Subject Tests: 800 (Math II), 800 (Physics), 800 (Latin)

**Work and Research Experience**

**HARVARD SCHOOL OF ENGINEERING AND APPLIED SCIENCES** Cambridge, MA

**Undergraduate Researcher**  May 2019 – Present

* Undergraduate researcher in Prof. Eddie Kohler's group at Harvard. Collaborating with Prof. Minlan Yu and Prof. James Mickens.
* Work on the user-level networking stack for lightweight VMs virtualized at the runtime level
* Design and implement a multiclient HTTP server in Lua that can be migrated live without breaking TCP connections
* Write and debug large codebase in C, C++, Lua and Python.

**Teaching Assistant**  Aug. – Dec. 2018

* Teaching Assistant for Harvard’s Introductory Computer Science course, CS50.
* Lead weekly 1h15min-sections to a group of ~20 students, hold office hours, grade problem sets and exams
* Contributed to hosting & organizing course-wide events such as the CS50 Puzzle Day, the CS50 Hackathon and CS50 Fair, where students showcase their final projects.

**POLITECNICO DI MILANO** Milan, Italy

**Research Assistant**  May – Aug. 2018

* Research assistant with Prof. Andrea Bonarini of the Artificial Intelligence and Robotics Lab (AirLab)
* Worked on a research project that used state-of-the-art machine learning techniques to improve tracking of human people by a moving robot.
* Wrote Python implementation of an overlapping mixture of Gaussian Processes to generate human motion profiles from potential leg detections from sensors onboard a moving robot.

**Select Projects**

**Chickadee**  Jan – May 2019

* Designed and implemented a whole multi-core kernel as term-time project for CS 161 at Harvard
* Managed and debugged large codebase in C++ with synchronization
* Implemented virtual memory, buddy allocator, processes, threads, wait queues, file system, disk support, buffer cache, signals and system calls.

**Let’s Meet!**  Nov. – Dec. 2018

* iOS app that enables users to instantly find people with whom they can study, eat lunch and do other activities – all without worrying about bothering people who don’t happen to be available at the same time as you
* Designed front-end of the app in XCode and wrote code in Swift
* Set up the backend using a custom MySQL online database and a REST API written in PHP and SQL

**SGAST (Series Graphing and Solving Tool)**  Sept. – Dec. 2016

* Java app that helps high school and college students learn infinite series.
* Designed app in Eclipse, wrote code in Java.

**Technical Skills**

**Programming Languages:** C, C++, Python, Java, Mathematica, Matlab, PHP, Swift, LaTeX, Lua, Stata

**Techniques:** Data Structures, Algorithms, Debugging, Operating Systems, Computer Networking, MySQL, REST API, Git