EUGENE LUO

Contact
- ✉ eug@cmu.edu
- ☏ 813-220-4989
- ⌘ github.com/eyluo
- ⊕ eyluo.github.io

Skills
Languages:
- C
- Python
- SML
- JavaScript
- Scala
- ASM (x86-64, ARM)
- OCaml
- SystemVerilog
- SQL

Tools:
- GDB
- Git + GitHub
- bash
- Simics
- macOS
- Linux
- React
- Scio
- GraphQL

Coursework
Current:
- 15-410: Operating System Design & Implementation

Completed:
- 18-349: Introduction to Embedded Systems
- 15-210: Parallel & Sequential Data Structures & Algorithms
- 15-213: Introduction to Computer Systems
- 15-150: Principles of Functional Programming
- 18-240: Structure/Design of Digital Systems
- 18-290: Systems & Signal Processing

Education
Carnegie Mellon University | **Pittsburgh, PA**
Expected Graduation May 20
B.S. Electrical & Computer Engineering
Additional Minor in Computer Science
- College of Engineering Dean's List F16 S17, UAA All-Academic Recognition

Experience
Teaching Assistant: 15-213 Introduction to Computer Systems
Carnegie Mellon University | Pittsburgh, PA | Aug 18 - Present
- Taught computer system concepts including x86-64 machine code, dynamic memory allocation, processes and threading to 60+ students over two recitations.
- Led office hours and large group review sessions for 200+ students.

Software Engineering Intern
Honey Science Corporation | Los Angeles, CA | May 18 - Aug 18
- Worked with Backend Data Engineering Team to update store information in GCloud Spanner and rewrote data pipelines to access new databases.
- Determined data quality standard for web-scraped store information by running SQL queries and working with the systems quality team.
- Updated React website components to access new GraphQL APIs.

Teaching Assistant: 15-112 Fundamentals of Programming & CS
Carnegie Mellon University | Pittsburgh, PA | Jan 17 - May 18
- Taught CS principles such as Big-O analysis, recursion, and OOP in recitations.
- Mentored 50+ students in project design for final term project and hackathons.

Frontend Developer
Carnegie Mellon Computer Science Academy | Pittsburgh, PA | Aug 17 - Dec 17
- Worked with design team to write frontend IDE components.

Projects
ARM Kernel
Partner-based project for 18-349 | Oct 18
- Wrote a kernel for Raspberry Pi in ARM and C that supports context swaps, rate-monotonic scheduling, and mutexes with highest-locker protocol for a thread pool.

SParQ
Spotify Party Queue | Dec 18 - Present
- Currently building an app with Spotify's Python API that maintains a dynamic priority queue for songs, allowing for voting songs on, up, and down the queue.

TrailerVR
Virtual Reality Trailer Viewer | Nov 16
- Developed a mobile app with Google Cardboard and Vuforia API to project a film's info and trailer onto a poster of the film in VR. F16 Hack112 Grand Prize.

Activities
Varsity Swimmer
Carnegie Mellon University | Aug 16 - Oct 18
- 2017 UAA Conference Team Member.

President
Plaidvocates | Aug 17 - Dec 18
- Organized wellness events and seminars for the student-athlete community.