

Eugene Chou

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EDUCATION

University of California, Santa Cruz Sep. 2020 – Present
Computer Science M.S.

University of California, Santa Cruz Sep. 2016 – Jun. 2020
Computer Science B.S. with Honors

SKILLS

Programming: C/C++, Python, Rust, Java

Frameworks: HTML/CSS, AWS, React-Native, Flask

Languages: English, Taiwanese, Chinese

EXPERIENCE

Storage Systems Research Center | Graduate Researcher Jun. 2019 – Present

- Worked on Artifice, a steganographic file system used to store information with concrete deniability.
- Design and preliminary results published in “Artifice: Data in Disguise”, MSST ’20.
- Developed a file system parsing kernel module in C for popular file systems such as ext4 and NTFS.

Jack Baskin School of Engineering | TA, Tutor, and Student Instructor Sep. 2018 – Present

- Served as a TA for the *Computer Systems and C Programming* course. Held discussion sections to assist students with coursework and designed an automated terminal-based grader for any Canvas-hosted course.
- Served as a group tutor and reader for the *Computer Systems and C Programming* and *Introduction to Operating Systems* courses.
- Instructed an undergraduate-led seminar on basic information theory and cryptography, also designing programming assignments for students to demonstrate knowledge through.

PROJECTS

Lempel-Ziv Suite | github.com/eugenechou/lempel-ziv-suite

- Developed a suite of programs capable of performing LZ78 and LZW lossless data compression.
- Wrote a full report on the exploration of Lempel-Ziv-based algorithms, presenting the design of each program, which became an accepted senior thesis.

Secure Walkie-Talkie | github.com/eugenechou/secure-walkie-talkie

- Designed and developed a secure walkie-talkie protocol for communication over insecure channels in C++ and Rust.
- Utilizes Diffie-Hellman key exchange, RSA signing, and SHA3-based tagging and verification.

SlugMarket | github.com/eugenechou/SlugMarket

- Designed and developed a centralized marketplace mobile app with a focus on the UCSC community using React-Native and AWS.
- Used AWS Cognito for user profile creation and management.
- Used AWS DynamoDB to serve as a scalable, load-balanced database to store marketplace listings.