

EDUCATION

Stony Brook University, Stony Brook

Computer Science • GPA 3.91 • 2016-2019 (Dec.)

COURSES

Systematic Programming, Designing, and Testing

Analysis of Algorithms *Optimization, NP-Completeness*

System Fundamentals *CPU Architecture, Kernel Prog.*

Theory of Computation *Turing Machines, Finite Automata*

Finite Mathematical Structures *Graphs, Combinatorics*

EXPERIENCE

Software Engineering Intern for LBI Software

Software Engineering Intern | May 2018 – Aug. 2018

- Full-stack development on LBI's human resources suite using Angular, TypeScript, Spring, and SQL.
- Reduced server startup time by 50% by building a wrapper for the BIRT runtime that runs directly inside the application, rather than as a separate deployment.
- Implemented RESTful API secured with JWT authentication.

Teaching Assistant for System Fundamentals

Teaching Assistant | Sept. 2017 - Present

- Teaching classes of 15- 25 students the concepts of computer organization, MIPS architecture, and control path design.
- Helping to introduce the MIPS Assembly programming language through live coding sessions.
- Holding office hours for 3 hours each week and moderating and answering questions on Piazza for over 150 students.

Ecosia Search Engine Partnership

Independent Developer | Feb. 2016 - Present

- Working with Ecosia to raise funds for their reforestation programs in Peru (Pur Project), Madagascar (Eden Project), and Burkina Faso (WeForest/OZG).
- Successfully raised enough money to plant over 500 trees total in the regions listed above.

PROJECTS

Polarity | VB.NET / HTML / JS

Dec. 2011 - Present

- Fast web browser built to optimize memory consumption through active garbage collection, yielding up to 50% lower RAM usage compared to Internet Explorer.
- Received over **1,000,000 downloads** since its release in 2013, averaging **4 stars** on popular download sites like CNET and Softpedia.

Dec. 2016 – Present

Cirrus | CSS / JS

- A modern, flexible CSS framework bundled with pre-styled components such as tabs, cards, modals, and modularized theming.
- Designed with relatively small footprint, using only **12.6kb** when minified and gzipped.

Nimbus | JS+Node.js / HTML / CSS / PHP

Apr. 2017 – Present

- A RESTful responsive web app designed to fetch random songs, songs based on user query, and songs related to the users' musical taste from SoundCloud.

Ecran | C

Apr. 2018

- Terminal multiplexor similar to Tmux, which supports up to **10 virtual sessions**.
- Extended functionality by adding ANSI emulation, status bar for terminal status, and split screen support.

Attendance | Java

Aug 2017 – Sept. 2017

- A fast, live image ID verification system powered by Google Text Recognition API/Tesseract OCR.
- Designed to be much faster than manually inputting into Google Forms.
- Student credentials are recognized on average within **10 seconds** of being placed in front of camera.