Jeremy Ku-Benjet

Email: jeremykubenjetschool@gmail.com

Education

Cornell University

Undergraduate, Computer Science, GPA: 3.882

Courses: Computer Architecture, Introduction to Compilers, Linear Algebra, Discrete Math, Multivariable Calculus, Object Oriented Programming, Functional Programming

Stuyvesant High School

Courses: Systems Level Programming, Computer Graphics, Complex Analysis, Math of Quantum Mechanics

Experience

Teaching Assistant

Worked in a small team to design, implement, and test infrastructure to safely host over 300 students attacking vulnerable C programs

Worked in small team to write an automated grading tool

Staffed office hours and lab component of the course

Projects

3D Rendering Engine

Implemented a 3D graphics engine supporting Phong and toon shading as well as animation based on a scripting language

Dynamic Wifi Extender

Investigated the feasibility of adjusting the signal strenght of an extender depending on the proximity to devices connected to reduce power usage. Implemented a demo on a Raspberry Pi.

OCaml Autoexamples

A WIP PPX written to automatically generate examples for OCaml funtion documentation based on input generators.

Wordle Tool

Wrote a tool find optimal starting words and the maximum game length of a game of Wordle.

Proficiencies

Languages

OCaml, Rust, C, C++, Java, Python, Assembly (x86-64 and RISC-V), Verilog, Lua, Bash

Tools

Dune, Cargo, Make, Maven, Unix Shell, Version Control (Git), Docker, Debuggers (GDB, LLDB)

Awards

AIME

Qualification for American Invitational Mathematics Exam (top 5% of AMC 12 participants, 2022)

CUHSPC

1st Place at Cornell University High School Programming Contest 2022

Big Red Hacks

1st of 204 participants at Big Red Hacks 2022 (hackathon hosted at Cornell University)