Evan Ruttenberg

6047 Wellesley Common East Amherst, NY 14051 edr3607@rit.edu 716-602-1367

OBJECTIVE

To apply knowledge of computer engineering principles and gain valuable experience through coop employment

GitHub: edrutte

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY

Bachelor/Master of Science in Computer Engineering, expected May 2024

GPA: 3.79/4.00

Awards: Dean's List Fall 2019 and 2020; RIT Founder's Merit Scholarship; 2019 National Merit

Scholarship semi-finalist; AP + PLTW Student Achievement in Engineering

Courses:

Computer Organization Assembly & Embedded Prog. with Lab

Digital System Design I & II with Lab

Applied Programing in C

Probability and Statistics I

Circuits I & II

Discrete Math for Computing

University Physics I & II Computer Science I & II

SKILLS

Programming Languages: Python, Java, VHDL, ARM Assembly, C, Verilog

Operating Systems: Windows, Mac OS X, Linux, Android

Software: Altera Quartus, ModelSim, Keil uVision, JetBrains IDE, Autodesk Inventor, Zoom, Xilinx

Vivado, Microsoft Office, Arduino IDE, Git

Hardware: Oscilloscope, Digital Multimeter, Waveform Generator, Breadboard circuits

PROJECTS/LABS

- Digital System Design II Lab: Designed and verified a MIPS processor in VHDL using Xilinx Vivado
- **Open-source Contributions**: Contributed Java code and Android UI XML to the open-source MTG Familiar Android app that parses Magic: The Gathering cards in a deck using regex. Full properties for the cards were retrieved from a SQL database and used to display metrics on the deck.
- **Digital System Design I Lab**: Built a circuit on a breadboard with IC chips that performed various Boolean expressions simplified using Boolean algebra for different LED outputs.
- PNNL Co-op: Worked on using the MLIR framework, CIRCT, TensorFlow and Jax to compile
 Python code into Verilog
- **Hobby Projects**: Programed the FRDM-K32L3A6 development board to collect microphone data using mixed C and ARM Assembly Language, 3D printing, FPGA development

EMPLOYMENT

Pacific Northwest National Laboratory Remote – Buffalo, NY July – September 2021

Worked on establishing a pipeline for compiling Python code into Verilog

Annapolis Microsystems Annapolis, MD January – May 2022

VOLUNTEERING

Buffalo Museum of ScienceBuffalo, NY
February 2019

Served as a docent for a LEGO exhibit.

The Foundry Buffalo, NY March 2019

Configured 3D printers to produce handouts to be given out at events.

ACTIVITIES / INTERESTS

Magic: The Gathering, Android modding/development