**Evan Ruttenberg**

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# OBJECTIVE

To apply knowledge of computer engineering principles and gain valuable experience through co-op employment. Available Spring 2022.

**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

Digital System Design I & II with Lab

Probability and Statistics I

Circuits I & II

University Physics I & II

Assembly & Embedded Prog. with Lab

Applied Programing in C

Intro to Software Engineering

Discrete Math for Computing

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
* **Software Development**: Worked in a team with 4 others developing an online checkers game using Java with the Spark Web Framework, Freemarker Template Engine and HTML based on demands and requirements from a customer-figure.
* **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
* **Open-source Contributions**: Wrote Java code and Android UI XML to parse names of 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.
* **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, NYJuly 2021 Worked on establishing a pipeline for compiling Python code into Verilog

# VOLUNTEERING

**Buffalo Museum of Science** Buffalo, 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