

Jedidiah E. S. Pienkny
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DOB: April 25th, 2001

EDUCATION

University of Michigan, College of Engineering, Ann Arbor, MI

May 2023

B.S.E in Electrical Engineering, Senior Standing. Minors in Computer Science and Mathematics

- Cumulative GPA: 3.877/4.0
- Admitted to College of Engineering Honors Program, Inducted into Tau Beta Pi (Winter 2021)
- Honors: Dean's List, University Honors (Fall 2019 – Fall 2021), James B. Angell Scholar (Winter 2021/2022)
- Relevant Courses, Probabilistic Methods, Intro to Semiconductors, Intro to Quantum Nanotechnology, Digital Integrated Circuits, Linear Algebra, Discrete Math, Intro to Digital Signal Processing
- Fall 2022 Courses: EECS 281, Power Systems Design and Operations, Digital Signal Processing Design Lab

WORK EXPERIENCE

Marvell Semiconductor, Package Integrity Intern, Burlington, VT [NDA, Engineering Project]

June 2022- August 2022

- Worked on a chip design for Marvell Semiconductor.
- Layout work primarily in Cadence Virtuoso.
- Experienced industry culture, industry workflow, and best Electrical Engineering design practices.

University of Michigan, Nuclear Engineering & Radiological Sciences, Ann Arbor, MI

October 2019-August 2021

Research Assistant

- Used Monte Carlo N-Particle (MCNP) to design novel photon and neutron shielding for a radiation detector/imager.
- Repaired a broken Class 4 Nd:YAG laser over a two-month period for laser induced plasma spectroscopy use [CUI].
- Learned about nuclear & solid-state physics, optics, semiconductor devices, signal processing, and circuit analysis.
- Utilized LTSpice to analyze preamplifier circuits to help mitigate the Miller effect from radiation detector capacitance.

PROJECT EXPERIENCE

Multidisciplinary Design Program: Keurig Green Mountain

January 2022-Present

- Prototyping new Keurig Cold Brew Machine.
- Designing fluid controls and power management systems.
- Collaborating with mechanical engineers and Keurig engineers to meet customer and technical requirements.
- Demonstrated flexibility and cooperation while going through various design iterations.

Michigan Mars Rover Team (MRover)

September 2020-May 2022

Power Subteam Member

- Streamlined the power management and electronics for the 2022 Mars rover.
- Worked on electrical box design and electrical systems for the 2021 rover.
- Researched methods of battery cooling/development for the rover's custom battery.
- Learned about manufacturing components of the rover and systems engineering.

LEADERSHIP

Tau Beta Pi Mi-Gamma (TBP), Service Coordinator

January 2022-Present

- Team leader of ~20 person Events Team (Service, Social, Professional Development, K-12 Outreach).
- Improved my organization-scale leadership skills (Task Delegation, Mentorship, Budgeting).
- Focusing on networking/reestablishing pre-COVID community connections.
- Identifying Ann Arbor needs so Tau Beta Pi can more effectively service the community.
- Acting as volunteers chair for UMich Fall 2022 SWE/TBP Career Fair.

SKILLS

Programming: C++, Python, MATLAB, JavaScript (D3.js)

Software: Altium, LTSpice, NI Multisim, Siemens NX, Autodesk Inventor (CAD and CAM), Cadence Virtuoso

Other: GitHub, GitLab, Visual Studio Code, Oscilloscopes, Single Channel Analyzers, Layout.