Daniel Wang

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SUMMARY

Current undergraduate student pursuing a B.S. in computer engineering with a concentration in computer systems. Interest and skills in hardware design and verification, computer architecture, and FPGA/SoC work. Seeking summer 2025 internships.

EDUCATION

Purdue University | Elmore Family School of Electrical and Computer Engineering *Expected Graduation: May 2027*
Bachelor of Science in Computer Engineering **GPA**: *3.64/4.0*

- **Relevant Coursework**: Data Structures and Algorithms, Microprocessor Systems and Interfacing, Advanced C Programming, Electrical Engineering Fundamentals I & II, Introduction to Digital System Design, Python for Data Science
- **Awards**: Dean's List, Semester Honors

EXPERIENCE

Introduction to Digital System Design (ECE 270) TA **West Lafayette, IN**
Undergraduate Teaching Assistant *Jan. 2025 – Present*

- Introduced students to digital system design fundamentals such as logic mapping and minimization, finite state machines, and RTL design through topics such as combinational, sequential, and arithmetic circuits
- Assisted students with debugging circuits and SystemVerilog code during labs and office hours

PROJECTS

Lunar Lander System on FPGA *Nov. 2024*

- Developed simple lunar lander computer system on an ICE40HX-8K FPGA that displays aerospace relevant values
- Integrated ALU, memory, control, and display modules using SystemVerilog and Verilator

Audio Equalizer *Nov. 2024*

- Designed and built circuitry for a 3-channel audio equalizer with low, band, and high pass filters to enable precise volume control across variable frequencies
- Achieved power output greater than 400 mW across a frequency range of 100 Hz – 10kHz with maximum ripple of 15mVrms

JSON Parser *June – August 2024*

- Implemented a decoder for the JSON data format in C
- Functionality includes handling of parsing of integers, strings, lists, bools, nulls, and objects

Good-Night Light *Feb. 2024 – May 2024*

- Designed and soldered PCB that uses operational amplifiers and photoresistors to create a working LED that brightens in absence of light
- Utilized LinnesLab library within EAGLE to develop schematic and board

TextLafayette *March – May 2024*

- Collaborated with a team of 4 to create a text messaging application via server sockets; was able to handle multiple users accessing the server at once
- Utilized JavaSwing library to implement interactive GUI elements and logged client data into a text file database
- Created video presentation to highlight our project's functionality which received positive feedback from peers and Purdue CS faculty

ACTIVITIES

Purdue SoCET (System on Chip Extension Technologies) **West Lafayette, IN**
Intro to SoCET member *Sep. 2024 – Present*

- Completed digital, physical, analog, and systems labs using SystemVerilog, Virtuoso, C, and RISC-V
- Worked alongside cohort of 2 others to present a poster on digital design to other Intro to SoCET members

Purdue ASME Grand Prix (EV) **West Lafayette, IN**
Battery team member *Sep. 2023 – May 2024*

- Performed relevant battery calculations to optimize cart performance, designed battery pack in CAD
- Addressed design challenges and solutions with team and assisted in the onboarding process for new members

SKILLS

Languages: C, SystemVerilog, Python, MATLAB, HTML, CSS
Tools: CAD, LTSpice, Linux, EAGLE, Excel, Git