Tyler Bisk

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EDUCATION

Cornell University | GPA: 3.84/4.00 Expected Graduation: May 2023

Bachelor of Science in Electrical and Computer Engineering / Computer Science

Coursework: Embedded Systems, Digital Logic, OOP, Functional Programming, Circuits, Signals, Computer Organization, and Discrete Structures

Newark Academy | GPA: 4.05/4.00 May 2019

International Baccalaureate Diploma Recipient

- Additional diploma obtained by top students in the class
- Most rigorous curriculum the school has to offer over the course of junior and senior year
- Wrote an extended essay called "Amazon's Use of Technology and Convenience in Order to Succeed in the Retail Industry in America"

RELVEVANT EXPERIENCE

Cornell Racing - Formula SAE Electric Fall 2019-Present

Electrical Team Lead

- Responsible for the organization, testing, and integration of the low voltage systems for an electric racecar
- Oversee and contribute to six student-designed boards, including an ECU, safety shutdown circuit, fusebox, and charge board
- Consistently dedicate 20 hours per week problem-solving, innovating, and teaching
- Created an analog shutdown system that cuts current to the battery pack and motor if certain safety conditions are not met
- Led both full-car and charging harness construction and plan to do so again
- R+D a custom BMS to be used in 2022

Advanced Micro Devices, Inc. (AMD) Summer 2021

Silicon Design Engineering Intern

- Member of the Cores Physical Design group doing computer architecture for x86 microprocessors 40 hours per week
- Helped decrease cycle time for next-generation Ryzen CPUs
- Worked to eliminate clock skew and minimize hold time in the branch prediction unit

Cornell University

Teaching Assistant for ECE 2300: Digital Logic and Computer Organization Fall 2021

- Mastery of course material including transistor network design, FPGAs, pipelining, and memory hierarchy

Teaching Assistant for ECE 1210: The Computing Technology inside your Smartphones Spring 2021

- Mastery of course material including FSMs, instruction sets, assembly, Boolean algebra, and digital logic

Camp Towanda Summer 2019

Engineering Intern and Counselor

- Handled AV and IT for all events and day-to-day operations
- Lived and worked at a coeducational overnight camp for a summer
- Created and led a recurring hands-on activity to get students excited about STEM

AWARDS

Dean's List All Semesters

- Awarded by the Cornell University College of Engineering

SKILLS

- **Software:** Altium (PCB Design), XCode, Quartus, Unix
- **Programming:** Python, Java, Swift, C, OCaml, Verilog (HDL), Assembly (ARM)
- **Hardware:** Board bring-up, board verification, Microcontrollers, PCB testing, soldering, Cortex-M0+
- **Certifications:** high voltage safety compliant (60+ Volts), Cornell mill and lathe certified