

Mitchell Arndt

3101 N. Valencia Ln. Phoenix, AZ 85018
(602) 576-5105 | mitchaarndt@gmail.com
View Online Portfolio: <https://marndt26.github.io/>

EDUCATION

- Purdue University** | West Lafayette, IN **August 2018 – December 2021**
Bachelor of Science in Electrical Engineering – Honors College
Computer Science Minor
Certificate of Entrepreneurship and Innovation GPA: 3.96
- Purdue University** | West Lafayette, IN **August 2021 - Present**
Master of Science in Computer Architecture GPA: 3.73
- Dean's List: Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021*

EXPERIENCE

- Computer Design and Prototyping Lab** | West Lafayette, IN **August 2019 – December 2019**
Computer Engineering Laboratory
 - Collaborated with a partner to design a dual-core, pipelined microprocessor with Instruction & Data caches using the MSI coherence protocol
 - Generated tests for microprocessor with System Verilog test benches and parallel assembly programs
- Autonomous Motorsports Purdue** | West Lafayette, IN **May 2019 – Present**
Electrical Lead Engineer
 - Lead team members to integrate drive control systems for self-driving race car by generating embedded C firmware to interpret serial commands and output PWM, analog, and digital drive control signals for high-speed navigation
 - Created custom PCB using KiCad to route control signals from microcontroller to electrical subsystems
- Purdue Neurotrauma Group** | West Lafayette, IN **Dec 2019 – Present**
Research Assistant
 - Collaborated with interdisciplinary team to precisely measure and analyze football tackle forces on a player's head
 - Programmed microcontroller to collect 120 analog channels at a 1kHz sampling rate and write data to SD card
 - Presented force collection device at Purdue Undergraduate Research Expo, receiving top scores from judging panel
- Northrop Grumman** | Chandler, AZ **June 2021 – August 2021**
Electrical Engineering Intern in Launch Vehicles Division
 - Developed graphical RSS Error Budget Analysis Tool for analog avionics sensors with Python and JavaScript
- E3 Displays** | Phoenix, AZ **May 2020 – August 2020**
Electrical Engineering Intern
 - Created testbench for Ventilator touch display for quality analysis, incorporating suggestions from operators
 - Automated adhesive dispensing process with embedded system to ensure precise temperature and mass allocations
- Card Connect** | Phoenix, AZ **May 2019 – Present**
Software Consultant
 - Work with CEO to produce new business management applications based on growing and changing needs
 - Automated payroll system with JavaFX to streamline 2-hr. employee payroll process to one button click

LEADERSHIP & PHILANTHROPY

- Tau Beta Pi Engineering Honor Society** **Spring 2020 – Present**
- Zeta Beta Tau Fraternity** — Athletics Chair, Freshman Class President **2018 – Present**
 - Puppies on the Porch, Get on the Ball (Riley's Children Hospital), PUDM
- Engineering Honors Peer Mentor** **Fall 2019 – Fall 2020**

SKILLS & CERTIFICATIONS

Programming Languages: C, C++, Java, JavaFX, Full Stack JavaScript, Python, MATLAB

Technical Skills: System Verilog, QuestaSim, Design Compiler, Git/GitHub, KiCad, ANTLR, STM CubeMX, LTspice