

## Education

- Sep '21-Present **Masters of Science, Computer Engineering**, *UC San Diego*, GPA - 4.00.  
Sep '18-Jun '21 **Bachelor of Science, Computer Engineering**, *UC San Diego*, GPA - 3.96.  
Organizations Tau Beta Pi

## Work Experience

- Jul '21-Present **LAUNCH Firmware Engineer**, Western Digital
- Developed firmware for NVMe enterprise SSDs
  - Experience with hardware debugging tools
  - Developed software unit tests and hardware integration tests
  - Created scripts that help speed up development processes

## Projects

- Mar '21-Jun '21 **GrieVe | Software Systems and Design Course Project | Game Development**
- GrieVe: 3v1 PvP top-down 2D/3D game where three hunters are tasked to kill a monster in a map.
  - Responsible for implementing networking, physics, and gameplay
  - Designed and implemented the communication interface for players and server
  - Demo: <https://www.youtube.com/watch?v=qfZCpvR-f60>
- Oct '19-Jul '21 **Brave New World | Undergraduate Research**
- Currently analyzing web resources sent to the user (**Javascript**, **Puppeteer**, Chrome Extension)
  - Examining the resources to discover potentially abusive behavior
  - Measuring the amount of unwanted resources in the Alexa Top 1M websites
- Jan '21-Mar '21 **PrivTag | Embedded Systems Course Project**
- PrivTag emits a BLE signal when dropped so that smartphones can identify the owner
  - Implemented I2C protocol to communicate with accelerometer to detect drops
  - Reduced power consumption by 90% to allow its battery to last up to a month
  - Used SPI to communicate with BLE module
- Jan '21-Mar '21 **Raspbian OS Benchmark | OS Graduate Course Project**
- Developed **C** micro-benchmark code to quantify Raspbian 32-bit OS performance
  - Measured Raspbian Scheduling, OS Services, Memory, Networking, and File System
- Mar '20-Jun '20 **KIWI | Team Project | Deployment: <https://kiwi-test-app.herokuapp.com/login>**
- (Software Lead) Led 9 other developers on an Agile framework to develop a forum-based app
  - KIWI is aimed towards companies by providing a private forums for remote collaboration
  - Developed **Node.js** code that sanitized user input and retrieved data from **Firebase**.

## Technical Skills

- Programming C++, C, Python, Java, Javascript
- Other Docker, Git, NVMe, Embedded Communication Protocols, VSCode, Linux
- Coursework Software Engineering, Product Engineering, Operating Systems, Wireless Embedded Systems, Data Structures and Obj-Oriented Design, Algorithms and Systems Analysis, Software Tools and Techniques

## Interests

- Software Engineering
- Embedded Systems
- Operating Systems
- Game Development & Gaming