

WORK EXPERIENCE:

ACCELERATE DIAGNOSTICS : SOFTWARE ENGINEER INTERN (May 2022 - Dec 2022)

- Full-stack development in Angular and .NET for an online Order Management System for lab technicians to carry out medical device testing.
- Developed a python application to allow users to export documents generated by medical devices.
- Worked on the user interface for the windows application and web client that is used to control medical devices.
- Performed various other software related tasks including documentation and code review.

TECH CORE : LEAD EMERGING TECHNOLOGIST (FEB 2021 - August 2022)

- Full-stack developer (.NET), in charge of all gear management, maintenance and logistics and lead Augmented Reality developer. Worked on multiple AR/VR projects using Unity, 8th Wall library, Aframe and Three.js.

COLLEGE OF ENGINEERING: TEACHING ASSISTANT (AUG 2020 - DEC 2021)

- Worked as an undergraduate learning assistant at the College of Engineering for the class ECE 175, a programming course focused on C Programming language with emphasis on engineering applications.

RECONFIGURABLE COMPUTING LAB: RESEARCH ASSISTANT (JAN 2022 - May 2022)

- Performed high performance computing research on neuromorphic computing in Dr. Ali Akoglu's reconfigurable computing lab.

NOTABLE PROJECTS:

- Eight-core Processor (Coursework): Created an Eight-core processor based on 32-bit MIPS Architecture and Verilog. Designed, created and implemented a six stage pipelined datapath on the Xilinx Artix-7 FPGA. The processor was optimised in stages to perform variable block size motion estimation.
- Apartment Tenant Portal (Coursework): Created an apartment portal software with native UI for conducting various day-to-day tenant and employee activities suitable for any commercial apartment complex. The software was written in Java.
- Re-membering the CIV (Tech Core): An augmented reality experience to view and walk through a 1:1 scale 3D model of a razed building structure. I was the lead developer for the project and calibrated the AR tracking algorithm and created the mobile user interface.
- GameSense 360 (Tech Core): Developed a prototype for a haptic headset which converts spatial audio to haptic feedback and gives the user an immersive 360 audio experience. The prototype was developed for a startup company called GameSense 360.
- Autonomous GPS Robot (Coursework): An Arduino based GPS robot capable of following a mobile device connected via Bluetooth. Used I2C and RS232 Communication for the microcontroller to interface with the various onboard sensors and wrote a navigation algorithm for the robot to utilize GPS coordinates and magnetometer data.

AWARDS:

INTERNATIONAL TUITION AWARD:

2019

DEAN'S LIST:

Fall 2019, Fall 2020,
Fall 2021, Spring 2022

DEAN'S LIST WITH DISTINCTION:

Spring 2020, Spring 2021
Fall 2022

ACADEMIC YEAR ACADEMIC DISTINCTION:

2019-2020, 2020-2021,
2021-2022

EDUCATION:

THE UNIVERSITY OF ARIZONA

AUG 2019 - PRESENT

- **BSC** : Electrical and Computer Engineering
- **MINOR** : Statistics and Data Science
- **HONOR'S COLLEGE**
- **SCHOOL YEAR** : Senior
- **CGPA** : 3.88
- **GRADUATION** : Spring 2023

SKILLS:

- FULL STACK DEVELOPMENT
- .NET
- REST APIS
- ANGULAR
- AUGMENTED REALITY
- VIRTUAL REALITY
- ELECTRONIC CIRCUITRY
- EMBEDDED SYSTEMS
- MIPS ARCHITECTURE
- FPGA SIMULATION
- HARDWARE PROTOTYPING
- BLENDER

PROGRAMMING LANGUAGES:

- C (PROFICIENT)
- C++ (PROFICIENT)
- C# (PROFICIENT)
- JAVA (PROFICIENT)
- JAVASCRIPT (PROFICIENT)
- HTML (PROFICIENT)
- CSS (PROFICIENT)
- PYTHON (PROFICIENT)
- TYPESCRIPT (PROFICIENT)

RELEVANT ACADEMIC COURSES:

- ECE 541: AUTOMATIC CONTROL
- ECE 479: ARTIFICIAL INTELLIGENCE
- ECE 513: WEB DEVELOPMENT
- ECE 369: COMPUTER ARCHITECTURE
- ECE 372: MICROPROCESSOR ORGANIZATION
- ECE 351: ELECTRONIC CIRCUITS
- ECE 523: MACHINE LEARNING