Kevin Gilman

(951) 813-8470 • kevingilman@arizona.edu

EDUCATION:

THE UNIVERSITY OF ARIZONA, College of Engineering — Tucson, AZ

Electrical and Computer Engineering | *Minor in Statistics and Data Science* | GPA: 3.853 — ***May 2023***

Academic Year Academic Distinction – 05/14/2020
Academic Year Academic Distinction – 05/13/2021
Academic Year Academic Distinction – 05/12/2022

SKILLS:

Software: C, C++, Python, Java, HTML, CSS, JavaScript, PHP, MATLAB, Focus, Excel, R
Relevant Coursework: Computer Programming for Engineering Applications, Object-Oriented Software Design, Fundamentals of Computer Architecture, Knowledge-System Engineering, Microprocessor Organization, Circuit Theory

WORK EXPERINCE:

EDGE Heating and Air | *Quantity Surveyor* | Murrieta, CA — **Jun. 2021-Present**

- Analyze HVAC blueprints and other documentation to prepare time, cost, and labor estimates
- Collect data and information from vendors, sub-contractors, and teammates to help determine costs for all aspects of each project
- Use of Planswift software to obtain necessary quantities for cost estimates

INTERNSHIP EXPERINCE:

EDGE Heating and Air | *Controls Engineer/Technician* | Murrieta, CA — **Jun. 2022-Aug.2022**

- Designed a controls system using Innotech Focus software to program Omni controllers for a building automation system to be installed on a construction site for an HVAC controls contractor
- Worked on a construction site running wires from external sensors and equipment to I/O ports of the Omni controllers to provide control of building heating and cooling
- Tested and balanced an HVAC controls system onsite for building commissioning
- Communicated with the general contractor's site building superintendents to discuss important dates and deadlines for HVAC controls testing and commissioning

PROJECTS:

APARTMENT PORTAL SOFTWARE | *University of Arizona* | Tucson, AZ — **Aug. 2021-Dec. 2021**

- Worked with a team of 3 throughout the semester to design an apartment portal software
- Experienced a full-scale software design process starting from the original planning of the type of software that we were going to design, coming up with a UML design, creating interaction models, developing, testing, and implementing with Java
- Learned Swing GUI framework

4-CORE PIPELINED PROCESSOR | *University of Arizona* | Tucson, AZ — **Aug. 2021-Dec. 2021**

- Complete understanding of processor design through FPGA based implementation
- Implemented a video processing algorithm in MIPS ISA and executed on the FPGA based emulation of the processor
- Worked with a team of 3 to create a custom processor designed to optimize a video processing algorithm at compile time and through hardware design for a class competition
- Implemented 4-core design to execute parallel running instructions
- Won the class competition after working as a team to create a competitive processor design and optimizing instructions at the compiling level

GPS TRACKING ROBOT CAR | *University of Arizona* | Tucson, AZ — **Mar. 2022-May 2022**

- Worked with a team of 3 to design and build an autonomous robot car that could follow the coordinates of a cellphone while maintaining a specific following distance
- Interacted with I/O Ports on an AVR microcontroller through C++ code designed to control the movement of the car
- Utilized sensors including a HMC 5883L compass, Adafruit ultimate GPS, and HC-05 Bluetooth module to provide necessary input data to the microcontroller to perform autonomous movement
- Applied various communication protocols to transmit data from sensors to the microcontroller to drive motor outputs