CHRISTOPHER CROUCH

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EDUCATION

University of Florida May 2023
B. S. Mechanical Engineering

Relevant Courses: Mechanical Design 3, Design and Manufacturing Laboratory, Control of Mechanical Engineering Systems, Programming Fundamentals with C++, Data Structures and Algorithms

TECHNICAL SKILLS

Languages Python, C++, Java, MATLAB, Visual Basic
Tools SolidWorks (CSWA Certification), Autodesk Inventor, Autodesk Vault, LaTeX, Git

PROFESSIONAL EXPERIENCE

RND Automation May 2022 - August 2022
Mechanical Engineering Intern *Bradenton, FL*

- Engineered and fabricated web slitter machine to help employees modify film for testing customer machines during debug phase
- Developed new form for engineering change notices that automatically creates requisitions for procurement department
- Worked in combination with engineering lead to modify medical assembly machine according to change order from customer

Warrington College of Business November 2019 - Present
Technical Support for Staff and Students *Gainesville, FL*

- Provided in-person and on-demand technical support throughout the business school for hardware, software and network issues
- Field user queries by phone and online submitted tickets, utilizing remote access to resolve problems

Herbert Wertheim College of Engineering March 2020 - May 2022
Research Assistant to Graduate Student - Solar Powered Systems in Residential Homes *Gainesville, FL*

- Aided in research that details a smart home system that controls and monitors energy consumption and output based on real time data to maximize efficiency
- Utilized MATLAB and Python to run simulations on modeled homes with real world data to analyze controller productivity

ENGINEERING PROJECTS

Bioreactor Shaker Table (Capstone Project) January 2023 - May 2023

- Collaborated with team to design, prototype, and assemble a shaker table that met that customer needs
- Customer needs included IPX-5 certification, capable of reaching 350 RPM on linear, orbital and double orbital patterns, and optical density/fluorescent intensity sensing
- Authored all software for the user interface and co-developed electrical schematic and circuit board

Web Slitter and Re-roller Machine May 2022 - August 2022

- Managed design and assembly on machine that takes rolls of film and cuts to a specified length by the operator then rerolls the film
- Presented project in layout and design reviews to engineering leads and team
- Created multiple custom parts and modified sub assemblies to achieve necessary functions in machine

Programming Projects: Personal Github August 2020 - Present

- Generated a Minesweeper copy game in C++ using the SFML library to capture user input and display graphics
- Created program in Java that acted as technical catalog which included attribute editing capabilities and sorting
- Designed AI in Java for Pacman with given interfaces that utilized inheritance, objects and advanced problem solving

AWARDS & INTERESTS

Eagle Scout (2018), International Baccalaureate Diploma (2018), Gator Beach Volleyball Club President (2020), High School Varsity Tennis Team Captain (2015-2018), Professional Pickleball Player, Climbing, Snowboarding, Beach Volleyball, Golf, Spanish