FABIAN VAZQUEZ

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EDUCATION

The University of Texas Rio Grande Valley Anticipated Graduation: May 2024
M.S. Computer Science

The University of Texas Rio Grande Valley Graduation: May 2022
B.S. Mechanical Engineering, **Honors:** Magna Cum Laude, Tau Beta Pi, Dean's List GPA: 3.77

Relevant Coursework: Data Structures and Algorithms (Coursera), Operating Systems, Theory of Computation

Technical Skills: Python (1yr), Rust (2mo), SolidWorks, Git, MATLAB, Microsoft Excel, Word, PowerPoint

EXPERIENCE

Colorado Engineering Inc., Colorado Springs, CO June – August 2021
Mechanical Engineering Intern

- Decreased manual labor time by 70% by designing and 3D printing templates used for bending, measuring, and cutting semi-rigid copper wires
- Reduced print time of 3D models by 30% while maintaining print quality by optimizing filament flow with increased axial movement speeds

Colorado Engineering Inc., Colorado Springs, CO June – August 2020
Mechanical Engineering Intern

- Innovated PCB mounting operation by communicating with engineers to create a versatile mount on SolidWorks, 3D print prototypes, test, analyze, and fix them for best solution
- Solved overheating issues of 50 different circuit board components by using thermal analysis to acquire heat sinks and fans for testing operations

Colorado Engineering Inc., Colorado Springs, CO June – August 2019
Engineering Intern

- Increased success rate of 3D prints to 95% by performing 3D printer routinely maintenance, replacing hardware, calibrating, and fine tuning through test prints
- Verified paperwork of more than 3000 parts of inventory on company database by creating an Excel spreadsheet to organize and track progress

PROJECTS

Calculator App, Personal Project September 2022

- Used **Python** to create a desktop calculator app, enabling students to easily carry out common mathematical operations and check their work

CSCI-6334, Operating Systems, Personal Project September 2022

- Used **Rust** to create a guessing game to showcase the application of common programming concepts such as variables, loops, functions, conditions, and basic data types

LEADERSHIP/ACTIVITIES

Teaching Assistant, Manufacturing Processes Lab August 2021-May 2022

- Managed teams of 6-7 students throughout laboratory experiments by communicating instructions, assigning tasks, supervising work, and maintaining lab safety
- Actively learned labs ahead of time to understand procedures, safely operate different machines, and effectively communicate with students