Francesco Ferri

Mechanical Engineering Student

[redacted] LinkedIn | [redacted]

Technical Skills

Mechanical

- F360, SolidWorks used to design projects involving FDM, GD&T and CNC machining
- DFM/DFA principles in F360 to decrease prototyping time and resources.
- Composite materials and woodworking

Electronics & Software

- C++ with sensor peripherals and user interfaces
- Arduino and PLCs for motion control of pneumatic and servo motor systems
- Linux/Bash/Raspberry Pi
- Soldering/Breadboard Assembly

Projects

Paper Loader 2021

Loading sheets of cardboard into industrial printers using pneumatics, servo motors and sensors while providing intuitive user experience to operators

Wood Storage Rack 2021

A storage solution for home, office and mobile applications built using plywood

IoT Totes 2021

Optimizes supply chain of fresh seafood from boat to processing plant

Education

University of British Columbia
Bachelor of Applied Science
Mechanical Engineering Major
Set 2019 - April 2024

CGPA: 82%

Experience

Study-Build | Mechanical Intern | Campbell River, BC
May 2021 – Dec 2021

- Developed paper loading machine to streamline production of thermally performant cardboard boxes, reducing use of EPS packaging in seafood industry while keeping production costs low
- Used DFM/A principles to design gantry structure of paper loading machine, decreasing manufacturing costs during CNC machining and 3D printing
- Led development of software for paper loading machine with C++ and Arduino platform by following value and KPI based approach; decreased loading time and increased safety of loading machine
- Designed modular storage platform for electronics, servers and office supplies, allowing users to customize storage modules based on their needs
- Collaborated with team to build a system in excel to track status of projects based on tasks and weekly sprints; increased productivity and more goals achieved per week

UbreakIfix | Electronics Repair Technician | Kelowna, BC
May 2020 – August 2020

- Collaborated with a team of 5 technicians to design flowcharts tailored to manufacturer's specific repair procedures, reducing repair times and human error, adding to training tools for new staff.
- Managed daily repair cues to deliver reliable repairs on time, ensuring customer satisfaction with average repair time of 2 hours

Sailing School | Sailing Instructor | Sestri Levante, Italy
May 2015 – August 2019 *summer position*

- Performed maintenance on Lasers using composite materials for structural components, refurbishing school's fleet; implemented quality control measures and cost analysis to determine repair approach

UBC Sailbot | Wingsail Team | UBC Vancouver
January 2022 – Present

- Collaborated with a team of 4 students to research wingsail design involving composites, aerodynamic and durability estimations; followed a value-based design approach to select concepts.