

Xirui Huang

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Experience

Lockheed Martin, Industrial Engineering Project Manager

Ottawa, ON, Canada

Jan 2024 - Apr 2024

- Assessed over 100 projects through Jira query data analysis to estimate price and time constraints.
- Served as a liaison between managers, engineers, and customers by leading and holding meetings.
- Used software to input request data, create graph trends, and present findings to senior managers.

Isakson Investments Inc., Project Engineer

Montreal, QC, Canada

May 2023 - Dec 2023

- Participated in initial property assessment, pre-offer verification inspection, and renovation planning.
- Analyzed properties for real estate financial projections, which led to a 260,000\$ purchase (75% ROI).

Concordia University, Mechatronics Systems Intern

Montreal, QC, Canada

May 2022 - May 2023

- Interned alongside a PhD student in the Mechanical/Industrial/Aerospace Engineering department.
- Completed Robotic Systems course with a ([final presentation](#)) in front of 3 Concordia professors.
- Gained hands-on experience with 3D printers, Arduinos, Electric PCBs, Robotic Sensors.

Projects

Rocket Launch Simulation ([Project Repository](#))

Apr 2024

- Built a waterbottle rocket and took data from initial settings with Excel and experimental launch with Tracker software.
- Simulated theoretical flight with Python, fluid mechanics, and calculus, then compared with experimental flight results.

DietMe Mobile App ([Prototype Link](#))

Mar 2024

- Used Figma to create the DietMe app to help people with dietary restrictions enhance their cooking and shopping experience.
- Presented prototype at Western University's PDS 2024 and ranked 3rd out of 54 competitors.

Solidworks Helicopter

Nov 2023

- Designed and assembled a 3D helicopter with a rotating propeller and shelled body in Solidworks.
- Created sectional view projections, exploded view, and BOM while following GD&T conventions.

Loku Lanka Social Project ([Documentary](#)) ([Report Video](#))

Jun 2021

- Raised 17,000\$ and supervised team budget, fundraising campaigns, backlog, and timeline.
- Built a garden and compost for a homeless shelter, created 3 new jobs for shelter residents.
- Filmed and produced a documentary with 9 other students to raise awareness on homelessness.

Skills & Technologies

Skills: English, French, Mandarin, Electrical Systems, WHMIS, Project Management, 3D Design (SolidWorks), Arduino, PCB

Technologies: C++, Python, HTML, CSS, Javascript, Figma, Jira, Adobe Suite, Excel VBA, Microsoft Suite, Matlab, React, SQL

Education

University of Waterloo, Candidate for Bachelor of Applied Science in Systems Design Engineering

Waterloo, ON, Canada

- GPA: 3.98/4.00 - 95.3%, Dean's Honor List
- Elected Engineering Society Cohort Leader for SYDE program, Rocketry Design Team Member.
- UWaterloo Sir Isaac Newton 2022 Physics Competition - 1st place in school, 76th place overall, and 96th percentile worldwide.
- Coursework:** Data Structures & Algorithms, Digital Systems Computation, Engineering Design.

CEGEP Marianopolis College, Diploma of Collegiate Studies, Sciences Program

Montreal, QC, Canada

- GPA: 35 R-Score - 90%, Dean's List Upon Graduation
- CEGEP Thesis - Epreuve Synthese: ("[Is There Anybody Out There?](#)" [A Written Report on Exoplanets](#))
- Coursework:** Electricity & Magnetism, Waves & Optics, Finite Mathematics, Engineering Physics, Calculus, Linear Algebra, Modern Physics & Astrophysics.