Kobe Barrette

Problem Solver • Analytical Thinker • Bilingual (EN/FR)

Projects

Reverse Engineered Sewing Machine

- Participated in disassembling and replicating sewing machine components in SolidWorks.
- Led the assembly and animation team in recreating the system within 3D software.

Solidworks

Autonomous Pathfinder

- Designed and implemented a smallscale vehicle capable of navigating a maze on its own.
- Performed tipping point analysis using centre of mass gravity calculations to enhance vehicle integrity.
- Participated in vehicle design and assembly using Meccano kit.

Arduino

3D Printed Kinder Toy

- Designed a video-game inspired toy capable of being disassembled (by a child) and placed inside a kinder maxi egg.
- Created and printed components using 3D plastic filament printer.
- Generated Detailed 2D component drawings.

Solidworks, MS Office Suite

Experience

Northern Ontario Wires Inc. | Engineering Research & Development (Co-op) May 2024 – Aug 2024 | Cochrane, ON, CAN

- Local electricity distribution company responsible for distributing power to the towns of Cochrane, Iroquois Falls, and Kapuskasing.
- Built 3D software models of new powerline systems using SPIDAcalc and ran integrity analysis on the models.
- Created construction drawings for powerlines using AutoCAD.

RidgeTech Automation | Control System Specialist (Co-op)

Jan 2024 - April 2024 | Cambridge, ON, CAN

- A control system developer and consulting company having provided solutions for over \$1 billion worth of industrial equipment.
- Utilized AutoCAD to work with 2D building plans for high priority clients.
- Adapted an Agile Scrum framework participating in daily stand-ups, weekly demo sessions, and managing jobs using Atlassian's JIRA.
- Configured and trained Cognex camera's using Vision In-sight to provide autonomous assistance.

Department of National Defence | Engineering Student Project Manager (Co-op)

May 2023 - Aug 2023 | Ottawa, ON, CAN

- Worked on the Chemical Biological Radiological Nuclear explosives Enhancement (CBRNe) project to procure advanced (multi-million dollar) engineering capabilities for the Canadian Special Operations Forces Command (CANSOFCOM).
- Researched complex mechanical systems, some of which include night vision goggles, naval remote turret systems and autonomous explosive drones.

Newmont Gold Mine | IT Support (Student)

May 2022 - Aug 2022 | Timmins, ON, CAN

- Worked as part of the IT team at one of the world's largest gold mining operations, with sites operating in 9 different countries.
- Performed hardware repairs and upgrades to various pc types.

Education

University of Guelph, 2021 | BENG, Engineering Systems and Computing

- Maintaining a 3.6 (83%) GPA
- Received Mechanical Design Associate certification for Solidworks

Contact