

Education

Master of Engineering **University of Calgary** **Nov 2023**

- Specialization in Software Engineering, GPA: 3.9
- Courses: Databases, Machine Learning, Algorithms, Data Structures, Design Patterns, Software Architecture & Testing

Bachelor of Science **University of Calgary** **Apr 2022**

- Major in Electrical Engineering, GPA: 3.4
- Courses: Circuits, Logic Design, Signal Processing, Computer Networks, Photovoltaic Systems, Power Systems & Protection

Experience

Software Engineer Intern **Benevity** **May – Aug 2023**

- Developed a web application feature like Spotify's yearly "Wrapped" in agile setting, for marketing and brand promotion.
- Led the backend design and development using Java and leveraged Spring Boot benefits to improve development speed.
- Created many REST API endpoints for frontend-backend communication, while optimizing code to minimize latency.
- Wrote backend tests utilizing JUnit, fixed bugs, and maintained dependability and reliability by continuous testing.
- Aided frontend design and development, using Figma and Vue, prioritizing user-friendly and visually appealing designs.
- Implemented serverless deployment to the cloud (AWS, Docker, EC2 instances, S3 buckets), assuring scalability on demand.
- Contributed to constructing a CI/CD pipeline, ensuring automated testing, and streamlined deployment processes.

Project Manager Intern **Siemens Energy** **May 2021 – Aug 2022**

- Assisted lead project manager in overseeing various stages of transmission service projects to successful execution.
- Supported scheduling using Gantt charts and in budget management to improve efficiency and achieve higher profit margins.
- Collaborated with multi-disciplinary program teams to meet technical, schedule, and cost requirements.
- Coordinated the timely completion of required certifications, tests, and training to meet the site compliance requirements.
- Recorded and reported project progress to the lead project manager, ensuring effective communication and project tracking.
- Conducted procurement tasks, obtained quotes, managed inventory and site logistics, to improve operational efficiency.

Projects

Airbnb Price Prediction **Big Data** **Jan – Apr 2023**

- Collaborated on a NLP machine learning model, to assist hosts with pricing and customers with insights on pricing fairness.
- Conducted sentiment analysis (positive, negative, neutral) on a 1000 reviews to enhance the accuracy of the model.
- Leveraged Databricks benefits; optimized code for improved execution speed; processed dataset with 100,000+ rows.
- Preprocessed raw review data to enhance data quality; ensured the preparation of clean data for analysis.
- Utilized TF-IDF and HashingTf methods, to improve feature extraction representation and overall model performance.
- Experimented with many algorithms to find the most effective one, contributing to the development of a reliable model.

FODS **IoT** **Sept 2021 – Apr 2022**

- Collaborated on developing a system to detect dangerous heat levels on farms, aiming to prevent fires and associated risks.
- Partnered with Aurora Wireless Networks to integrate the thermal detection system with their "MLink" system technology.
- Contributed to designing the system architecture, focusing on automation, and streamlining of the heat detection process.
- Designed PCBs and wrote the C# code for integrating crucial functionalities like temperature recording and GPS tracking.
- Hosted a MySQL database on AWS, ensuring organized storage and reliable communication with the cloud.
- Performed extensive testing in the lab and at W.A. Ranches to ensure compliance with accuracy and reliability requirements.

Skills

- **Machine Learning:** Scikit-learn, TensorFlow, PySpark, Databricks, Natural Language Processing (NLP)
- **Languages & Frameworks:** Java, Python, C++, C, VHDL, Assembly, SQL, Bootstrap, Vue, Spring Boot, Flask, JUnit
- **Other:** Object Oriented Programming (OOP), SOLID principles, AWS, Docker, Jenkins, CI/CD, Git, Slack, Jira, Agile
- **Certificates:** Lean Six Sigma White Belt, AWS Cloud Practitioner, AWS Solutions Architect Associate