Shreya Saxena

+1 7789563004 |shreya.saxena@gmail.com | LinkedIn |GitHub

Personal Portfolio Website

EDUCATION

University of British Columbia (**UBC**) – **4th year** BSc**, Computer Science** with **Co-op**. **Dean's List.** 2021-Present

SOFTWARE SKILLS

Languages/ Frameworks: Python • Java • AIML • R-studio • Django • Android Studio • Embedded systems • Unity • MySQL Framework/Libraries • Javascript • React • NLP • Roboflow • Bootstrap • Node.js • OOP • DBMS • Angular • CSS • Linux
Technologies/ tools: Microsoft Azure • Agile Methods • Postrges database • Python Scripting • REST API • Firebase • Data Structures, Algorithms • GitHub • SDLC • Docker • CI/CD• VCS • CLI • Adobe XD • NLP • Powershell • Spline

EXPERIENCE & INTERNSHIP

Software Engineering Intern, *Ericsson* **Sep 2024 – Present**

- Collaborating with XFT teams across five countries to implement and test a **Gen AI coding assistant** aiming to help increase development efficiency by 80%. The tool uses **Mistral LLM** and Retrieval Augmented system(**RAG**). Leveraging **ML** methods the tool generates code, provides intelligent insights and dynamic code reviews/templates.
- Ensuring integration and **optimization** of 5G features by leveraging **Test-Driven Development**(TDD) principles. Collaborating with global teams to sync on testing strategies, improve frameworks, and adapt architectures.

Undergraduate Software Development Research Assistant, *Rogers Communications, UBC* **May 2024 – Aug 2024**

- Collaborated in a team of 10+ to develop an AI-driven wildfire risk prediction model on **Microsoft Azure**, leveraging **IoT** and **satellite remote sensing data**. Worked on enhancing system capabilities for **real-time analytics**, focused on environmental variables critical for wildfire risk management.
- Engineered a user-friendly web interface to display live wildfire risk data and predictive analytics along, worked on backend development (**DBMS**), **optimizing data integration** and processing for enhanced AI model performance.

President and Founder, *Artificial Intelligence Club UBC* **Sep 2023 – Present**

- Founded the Artificial Intelligence Club with over 300+ members and spearheaded a team of 5+ developers, built the club software project-AI Chatbot using **Java** and **AIML** along with conducting workshops on programming**.**
- Conducted hackathons, Informative sessions on **version control**, software engineering and AI in collaboration with industry experts.

Technical Intern, *Xebia* **Jun 2022– Aug 2022**

- Constructed a Carbon Emission Calculator collaborating with a team of 5+ developers, built a robust backend with **Postgres database,** implemented **task automation** to process battery reports using **Python scripting** and JSON.
- Created the frontend using **CSS, Javascript** and **Bootstrap**, focused on presenting our findings to the company in sprints implementing **Agile methodologies** and following the **SDLC**.

SELECTED PROJECTS

ML Food waste management recognition app | (Machine Learning, Roboflow, Yolo v8, Flask, Python, MySQL) **Link**

- Collaborated in a team of 5+ to create an **image detection/analysis** software for food items using **CUDA**, **Roboflow, Yolo v8** with 80% accuracy for item recognition in real time using **ML** and **CI.**
- Built the backend using **Python, structured SQLite database, automated unit testing** for inventory management with an integrated **REST API** for data manipulation**,** constructed the frontend using **CSS, Javascript** while integrating **Flask** to verify the data and connect the frontend and backend.

Full stack carbon emission calculator|(APIs, Django, Postgres database, Docker*)* **Link**

- Collaborated with a team of 7+ to create the backend through **API development, Django** and utilised **task automation** to gather battery report data to calculate CO2 emissions from machines using **Python scripting.**
- Maintained the application by containerizing our user-friendly web interface using **docker** and stored data in **Postgres.** Performed **data cleansing, data quality checks** for **efficient data retrieval.**

100 years of aircraft data analysis |(Python, Python libraries, data analysis, Databases, Tableau, research*)* **Link**

- Performed detailed data analysis of aircraft incidents using **python** spanning 100 years, from 1920 to 2020 by incorporating **python libraries** like **BeautifulSoup, pandas, matplotlib, seaborn, numpy**, and **plotly**.
- Analysis performed through research on relationships between aircraft types, incident timing, and operator location details focused on implementing **data visualization(Tableau)** using **interactive visual libraries**.

Chatbot software development|(NLP**,** AIML, Java, Version control, Alicebot frameworks) **Link**

- Spearheaded a team of 5+ executives for the development of an AI chatbot utilizing **AIML, NLP** and **Java**.
- Maintained **Version control** while **connecting** the **Alicebot framework** to work with variations of AIML(**XML**) files and successfully executing the steps in **SDLC.** Documented the dev. process on **GitHub** as a guide.