# SAHIL MAHEY

♥ St. John's, NL, CA

# Technical Skills

Programming Languages: C++, Java, Python, C, JavaScript, TypeScript

Web Development Technologies: React.js, HTML5, CSS3, Bootstrap, Node.js, jQuery, Express.js

Data Science Technologies: Pandas, Seaborn, Matplotlib, NumPy, Geopandas, Scikit-learn

Database Management: MongoDB, PostgreSQL, SQL, Postman API

Additional Skills: Microsoft Foundation class (MFC), CI/CD, AWS, XML, Linux

Experience

## **Data Quality Specialist**

May 2024 - Present

SiftMed

St. John's, NL

· Conduct comprehensive data analysis, sorting, and review of both medical and non-medical information, including accurate medical data labeling, to ensure high precision and optimized document workflows.

#### Software Developer

September 2023 – Present

Memorial University of Newfoundland

St. John's. NL

- Implemented a highly efficient search functionality in a full stack web application (Link), leveraging Remix, TypeScript, Python, PostgreSQL, Docker and Linux, enabling users to seamlessly explore and filter chemical compounds.
- Collaborated with the development team to enhance the user interface and experience of the website using Chakra UI.

#### Software Developer Intern

May 2023 - August 2023

CSIpix Forensic Software

St. John's, NL

- Developed C++ code utilizing Microsoft Foundation Class (MFC) and Dynamic Link Library (DLL) to integrate with existing CSIpix software, enabling extraction and display of data from binary and XML NIST files in a table format.
- Implemented manual editing, copy and printing capabilities, enhancing functionality and usability in the software.
- Performed thorough pre-release testing of CSIpix's new software, identifying critical bugs to prevent crashes.

#### Software Developer Intern

November 2022- February 2023

GAO Tek Inc.

- Debugged and successfully build different C++ projects assigned by the team manager using Microsoft Visual Studio.
- Collaborated with business development team in expanding the company products by contacting the clients on LinkedIn.

### **Projects**

Breast Cancer Machine Learning Project (Link) | TensorFlow, Keras, PyTorch, Pandas

May 2024 - Present

• Developed a CNN model for breast cancer classification in MRI images, achieving 76% accuracy on the independent MAMA-MIA dataset. The project is ongoing, with current work focused on implementing a Vision Transformer (ViT) model for classification, and future plans to perform tumor segmentation using a UNet++ architecture.

Dylan - AI Product Manager (Link) | Python, Streamlit, Jira, API Integration

April 2024 - May 2024

• Collaboratively designed an AI assistant to automate product management tasks for Google AI Hackathon, integrating technologies like Gemini AI, Jira, Google APIs, and D-ID Avatar APIs to enhance team productivity.

Tom's Maze Chase (Link) | Three.js, JavaScript, Github

January 2024 - April 2024

• Designed an interactive maze game with advanced AI pathfinding, collision avoidance, and procedural map generation for an academic project using Three.js, JavaScript, A\* algorithm, state machines, Perlin noise, and Halton sequence.

Data Structures and Algorithms (Link) | C++ STL, Containers, Iterators

November 2023 - January 2024

 Applied array, vector, map, set, binary search tree, graphs and linked list data structures, along with advanced algorithms like binary search, quick sort and depth first search to solve complex LeetCode problems effectively.

Data Science Academic Projects (Link) | Pandas, Matplotlib, Scikit-learn, Seaborn April 2023 - December 2023

- Visualized Canadian air safety data spanning 25 years to gain insights into the causes of air accident.
- Developed a Logistic Regression machine learning model using the features of Wine Dataset to predict wine quality.

Front-end Projects (Link) | React.js, HTML5, CSS3, JavaScript, Bootstrap

September 2022 - July 2023

• Transformed design concepts from Frontend Mentor challenges into functional and visually appealing web applications.

## Education

## Memorial University of Newfoundland