

Sarvan Gill

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Education

University of British Columbia
BASc Engineering Physics
Graduated with Distinction

2017 – 2022
GPA: 87/100

Experience

Amazon

2022 - 2023

Software Development Engineer (L4)

Java, Javascript, GraphQL, Git, CI/CD

- Improved public endpoints for buyer experiences on AWS Marketplace
- Increased filter support and maintained the sidebar filters used by customers to browse products
- Mitigated and solved any customer impacting and internal facing bugs at any time while on-call

Safe Software

May 2021 - August 2021

C++ Software Development Intern

C++, C++17, Git

- Worked with a small Agile team on implementing features relating to the manipulation of geometric data
- Worked with modern C++ features including smart pointers, move semantics, variant logic etc
- Implemented a new algorithm that improved user run time from the order of hours to seconds (1627x improvement)
- Created multiple integration, unit and regression tests

Intel

May 2020 - Dec. 2020

Firmware Engineering Intern

C++, C, Python, Assembly, Git, NAND SSDs

- Contributed to firmware production as a part of a small scrum team following Agile methodology
- Wrote production firmware for Intel solid-state drives
- Implemented support for interrupt driven I2C
- Reviewed and advised on a machine learning model to automate signal waveform recognition

TRIUMF

Jan 2019 - April. 2019

Research Intern

C++, MATLAB, Solidworks, COMSOL

- Optimized reflector geometry on photomultiplier tubes for Hyper Kamiokande, JPN
- Designed a large permanent magnet spectrometer (up to 2 Tesla) for a new experiment in FERMILAB, USA
- Ran large simulations using a local cluster and Compute Canada Servers

Projects

2D Platformer Video Game

Aug. 2023 - Ongoing

A simple but satisfying game that I am working on

C#, Unity, Git

- Independently learning the basics of game development with an emphasis on developing good habits

Kaon Classifier

Nov. 2020 - April 2021

Machine learning model to recognize extremely rare particle decay

Python, PyTorch

- Created a machine learning model to reject specific backgrounds for an experiment at CERN
- Implemented two classifiers: a boosted decision tree and a neural net
- Collaboration with physicists at TRIUMF

greenEats

Sep. 2022

NWHacks 2020 Winner - grocery manager and recipe recommendation app

JavaScript, Java

- Won 1st out of 145 teams and 769 participants
- Created a custom API that scraped the web and recommended recipes based on your current inventory

Skills

Languages:

C++, C#, C, Python, Java, MATLAB, HTML/CSS

Technologies & Tools:

Linux OS, Windows OS, PyTorch, Git, ROS, SOLIDWORKS, COMSOL Multiphysics, CI/CD