

Karanbir Gosal

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FAMILIAR WITH

C/C++

JavaScript

MySQL

HTML

Java

Bash Scripts

REST API

GIT

Assembly

LaTeX

React

Agile Methodology

Python

WORK EXPERIENCE

VertiGIS, Victoria, BC

May 2023 – August 2023

Quality Assurance Analyst – Co-op

- Participated in Agile Software Development to advocate for the end users of VertiGIS Studio Web through vigorous manual and automated testing.
- Created automated functional test scripts with Typescript, WebdriverIO, Mocha and Chai to increase test coverage; used Azure DevOps for tracking work, run builds and manage tests.
- Improved stability and performance of the automated functional test suites after migrating to WebdriverIO's asynchronous API.

ACADEMIC QUALIFICATIONS AND COURSEWORK

University of Victoria, BC

2021 – Present

Bachelor of Software Engineering – Current GPA: 8.63/9.0

- Programming Fundamentals
- Linear Algebra
- Calculus I, II, III
- Continuous Time Signal
- Computer Architecture

Langara College, Vancouver, BC

2017 – 2019

Computer Science and Technology Diploma – GPA: 3.7/4.0

- Object-Oriented Programming
- Algorithms and Data Structures
- Unix Tools and Scripting
- Database Systems
- Networking

CAREER STATEMENT

"I feel that my greatest strengths are firstly my passion for Software Development as a whole, an obsession that allows me to spot trends and develop best practice processes. Secondly my skill at developing and maintaining a close working relationship with every company, something which in turn helps me to gain an in-depth understanding of their needs. Thirdly my strong commitment to providing a professional service."

Karanbir Gosal

RELEVANT TECHNICAL SKILLS AND PROJECTS

Software Development and Networking

- Completed various lab projects including: a GUI application with Java for a spaceship game; Hotel reservation system using C++; LED blinking using a pattern push button with STM32- Microcontroller in Arm Assembly.
- Created databases, tables using MySQL, and used the data constraints like foreign key, primary key, not null alongside the basic SQL queries.
- Deployed Enterprise-Wide computing resources using client/server architecture and used HTTP, TCP protocols in various lab projects; resolved basic networking issues.
- Designed my own scripts to automate various tasks and gained deeper understanding of CLI, filters, pipelines, file organization and security issues.

Programming Language and Operating Systems

- Used C/C++, Java, Assembly, JavaScript, HTML, MySQL, Virtual Machines, Linux distributions, Windows distribution.
- Utilized threads, interrupts to do multitasking, improve speed of applications.

PERSONAL SKILLS

Attention to detail

Innovative

Critical Thinker

Problem solving

Reliable

Team player

Project management

Passionate

Imaginative

Creative

ACTIVITIES

Table Tennis

Swimming

Yoga

Testing, Technical Writing and Communication

- Debugging, testing and troubleshooting experience with various embedded modules, IDEs, testing tools such as JUnit for unit tests in labs.
- Created proposals, progress reports, user manuals, summaries in technical writing courses.
- Worked on various lab reports and requirement specs presenting the final work in LaTeX.

Software, Tools, Microcontrollers and Lab Equipment

- Worked with MS Visual Studio, Eclipse, MATLAB, Arduino IDE, System Work Bench IDE.
- Utilized Oscilloscope, Routers, Modems, power supplies, soldering stations, ARM Microcontroller, Arduino, RF transmitters and receivers, etc.

PERSONAL PROJECT WORK, CLUBS AND VOLUNTEER

Smart Lighting Automation System

- Used Arduino, real-time clock (RTC) and Relay to automate outdoor lighting to turn on/off at specific times depending upon day of the week and month of year.
- Learned to do all the soldering and circuit work.
- Ensured the system is functional and accessible under varying conditions.
- Designed efficient algorithms to optimize energy sources.

Personal Portfolio Website

- Designed portfolio website using basic HTML, CSS and JavaScript.
- Responsive design and easy to navigate.
- Adjustable Dark/Light mode feature.

Orientation Leader

- Lead a group of forty students on a campus tour and created a welcoming environment for them.
- Facilitated ice-breaker activities to create social connections between students and encourage team work.

UVic AI Club

- Working with club members to train the model using Q-learning for Battlesnake competition and Hackathons.
- Developing plans to make use of new technologies in daily life such as ChatGPT.
- Designed a brochure for the club to encourage more students towards AI.

KEY COMPETENCIES AND SKILL

- Organized own workload efficiently and prioritize each task.
- Passionate for customer service and respond quickly to enquiries.
- Managed multiple projects in a fast-paced, dynamic environment.
- Incorporated interpersonal and communication skills to easily interact with fellow developers.
- Adapted effective measures to concisely complete every assignment.
- Confident, friendly and easy to get along with.
- Developed strategies to pick up new techniques quickly.