267A, Tolcross Avenue, Victoria, BC V8Z 6K6 Email: samarthroy2106@gmail.com
Phone: (778) 922-6190 Website: samroy2106.github.io/portfolio

## **PROFILE**

- Detail-oriented, quick learner committed to maintaining a highly productive work-ethic.
- Very adaptable, possessing the ability to work and communicate effectively in diverse teams.
- Strong research and analysis skills, allowing efficient problem solving.
- Expected graduation: April 2022

## **WORK EXPERIENCE**

### Business Tools Developer - Tantalus Systems, Burnaby, BC | January 2019 - August 2019

- Completed web-service integration project to accept, process and create RMA (Return Merchandise Authorization) tickets for one or more returned products using Java and APEX.
- Performed business systems, server, and basic database administration and troubleshooting.
- Completed feature requests such as adding fields to reports or optimising reports for the company's internally used platforms.
- Produced easy-to-follow procedural documentation and detailed project documentation.
- Maintained clear, and constant communication with internal stakeholders.

#### Frontend worker – McDonald's Canada, Victoria, BC | May 2018 – October 2018

- Worked as a cashier.
- Prepared and served food to customers.

### Supply Chain Management Intern – Emsons Radio Corp., New Delhi, India | July 2015

- Monitored receipts of products and shipments.
- Worked as a quality control assistant, organising dispatch of finished products.

## **EDUCATION**

### University of Victoria, Victoria, BC | September 2016 - present

BSc Computer Science (minor in Business) – 4<sup>th</sup> year

#### Sanskriti School, New Delhi, India | July 2014 - May 2016

## **SKILLS**

#### Languages

- Proficient in Java, C, Python, PHP, and APEX (Salesforce).
- Comfortable with HTML, CSS, JavaScript, XML.
- Familiar with Robot-C, Assembly, and shell scripting.

#### Frameworks and Libraries

React, Node.js, jQuery, Express.js,
 Spring, Hibernate, Maven

#### Networking

- REST and SOAP web-services
- TCP/ IP, FTP, SMTP, SSH, clientserver programming (Apache, Node.js)

#### **Version Control**

GIT, GitLab, CVS

#### **Databases (Relational)**

• MySQL, MariaDB, Postgres

#### Diagramming and prototyping

 Figma, Balsamiq, Gliffy (UML, ER, state-machines, flow charts, etc.)

### **Operating environments**

• Windows, Linux

#### **Tools and applications**

 Atlassian JIRA, Atlassian Confluence, Salesforce, MS Office Suite, VirtualBox, Wireshark, PuTTY, WinSCP, Postman, SOAP UI, Eclipse IDE, PHP Storm, Ghidra

#### Others

- Proficient with the use of algorithms and data structures.
- Design and documentation.
- Debugging and troubleshooting.

## **PROJECTS**

Face Reader Full Stack Webapp | April 2021 - May 2021

Created a full stack web app using React, Node.js, Express.js and Postgres that uses a face detection API to detect faces in images given the image URL. The app features Registration, Sign In/ Sign Out, and User Entry Count.

#### React Liverpool Cards | April 2021

Created an aesthetically pleasing responsive React app to display current squad members of Liverpool Football Club. The app features a search function.

#### React To Do List | January 2021

Created a React based To Do List learn and implements concepts such as Components, Props, and States. A user may add items, check off items, and delete items.

### HealthLink BC Nutrition Manager Webapp (System Analysis) | Sept 2020 – Dec 2020

Did comprehensive systems analysis including profiling, diagramming (Fishbone, Functional Decomposition, Context Diagram, DFDs), Process Modelling, Refining Requirements, Risk Assessment, UI Modelling, Object Modelling, and Database Design to create detailed specifications for a novel Nutrition Management app for HealthLink BC.

#### Student Contact Manager Webapp | Sept 2020 - Oct 2020

Created a Student Contact Manager webapp using HTML, CSS, PHP, jQuery, jQueryUI, and MySQL to keep detailed records of students in a Datatables format. The app also features a 'Gender Admin Panel' to add new selectable genders to the database and consequently the frontend, and a 'Logging Panel' to log all actions and any errors from the app. Both frontend, and backend validation checks are implemented, along with CSRF protection.

#### Flight information tracking database | July 2020

Created and tested ACID compliant database schema with relevant constraints and triggers to reliably track flight related information.

#### Customer Development Research – Virtual Reality based product | June 2020

Prepared a presentation, performed a survey, and a subsequent statistical analysis to guide customer development research insights, conclusions, and future steps.

### Improvements to Ansible source code (Open Source) | April 2020

Made changes to improve the code structure of a few components of the Ansible source code (written in Python) significantly and measurably to practice open-source contribution.

#### C File System | March 2020

Created a file system to map file and directory data (and metadata) to blocks on a virtual disk for long-term storage and quick retrieval.

#### **Custom C shell | February 2020**

Wrote a C shell with a few built-in commands such as cd, pwd, help, exit, etc., the ability to execute files, and error handling.

#### University Course Registration Webapp Requirements Engineering | Sept 2019 – Dec 2019

Iteratively developed detailed requirements documents and mock-ups to aid application development, remove ambiguity, and present prototypes to stakeholders. For this, we conducted elicitation interviews, maintained constant communication with stakeholders, and clarified assumptions throughout the requirements engineering process.

#### Sustainability Market Research – Hydroponic Irrigation System | Oct 2018 – Nov 2018

Performed market research to determine target markets best suited for the chosen product, a scalable hydroponic irrigation system.

#### Underwater Autonomous Robot Prototype | January 2017 – March 2017

Designed, developed, and tested a prototype for an Underwater Autonomous Cable carrying robot constructed using a VEX kit and external proximity sensors, programmed using Robot-C.

## **ACHIEVEMENTS**

### Zero to Mastery: Become a Web Developer in 2021 | April 2021

Completed a full stack web development course on Udemy featuring HTML, CSS, JavaScript, and React, making a full stack web app as the final project.

#### Western Engineering Competition, Banff, BC (WEC 2017) | January 2017

Qualified for and participated in the Junior Design category, contributing towards **winning the Spirit Cup** as part of the delegation from the University of Victoria by displaying exceptional desire, enthusiasm, and team spirit.

### University of Victoria Engineering Competition (UVEC) | October 2016

Was placed first in the University of Victoria Engineering Competition (UVEC) for Junior Design, earning qualification to participate in the Western Engineering Competition, 2017 (WEC 2017) in the process.

Rutledge Park Design Project | September 2016 - October 2016

Was part of one of the top 17 teams out of 154 to come up with an engaging and educating design for a public washroom in Rutledge Park, Victoria, BC that operates on solar energy.

## **INTERESTS AND HOBBIES**

Soccer, working out, gaming, reading, learning about business and finance.

## **REFERENCES**

Surjit Singh – Business Tools Developer (former Supervisor at Tantalus Systems, Burnaby, BC)

Email: ssingh@tantalus.com, Phone: (778) 919-7634

Jack Jiang - Business Analyst (former colleague at Tantalus Systems, Burnaby, BC)

Email: jackjiang@gmail.com, Phone: (778) 922-2279