

# SAMARTH ROY

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## 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.

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## 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 – April 2022**

BSc Computer Science (minor in Business)

**Sanskriti School, New Delhi, India | July 2014 – May 2016**

## SKILLS

### Languages

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

### Frameworks and Libraries

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

### Networking

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

### Version Control

- GIT, GitLab, CVS

### Databases

- MySQL, MariaDB, Postgres, MongoDB

### 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, Jupyter Notebooks, Eclipse IDE, PHP Storm, Ghidra, Robo3T, MongoDB Compass

### Others

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

### **Chat App | August 2021**

Created a chat app built using Node.js and socket.io to allow multiple users to chat and share their location in real time. The app features chatrooms that users can join to share messages within the chatrooms.

### **Task Manager | July 2021**

Created a task Manager app backend built using Node.js, Express and mongoose that keeps track of completed/ incomplete tasks for multiple users. The app features authentication using jsonwebtokens as part of the login/ logout feature, file uploads using multer and sharp for user avatar pictures, sending welcome/ cancellation emails using SendGrid, and jest and supertest to test the application.

### **Weather App | June 2021**

Created a weather app built using Node.js and Express that uses geocoding and weather forecast API to provide real-time weather updates for a given location on the front-end, which is rendered using the Handlebars template engine.

### **Face Reader Webapp | April 2021 – May 2021**

Created a full stack web app using React, Node.js, Express.js and Postgres that uses a face recognition 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 to learn and implement 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

## **SAMARTH ROY**

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 full stack Student Contact Manager webapp using HTML, CSS, PHP, jQuery, jQueryUI, and MySQL to keep detailed records of students in a Datatables format. The app features the ability to add, edit, delete, and clone all fields for each student record. It also features an Admin Panel containing a Gender Admin Page to add new selectable genders to the database and consequently the frontend, and a Logging Page 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.

## SAMARTH ROY

### **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.

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## ACHIEVEMENTS

### **Complete Node.js Developer Course | August 2021**

Completed a Node.js development course on Udemy, making 4 apps in the process.

### **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.

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## INTERESTS AND HOBBIES

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

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## REFERENCES

**SAMARTH ROY**

**Surjit Singh – Business Tools Developer (Tantalus Systems, Burnaby, BC)**

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