University of Waterloo

Co-operative Work Terms

Suraj Patel 20849665 2B Computer Science, Honours, Co-operative Program

Work Term Employer Evaluation OUTSTANDING

May - Aug 2020 Ontario Ministry of the Attorney

General

Public Guardian and Trustee Toronto Ontario Canada System Support Officer (SSO) -

Programmer

Jan - Apr 2021 OkRx

Divisional Office

Oakville Ontario Canada

Software Development Associate

Planned Future Work Term(s)

Sep - Dec 2021

May - Aug 2022

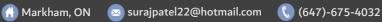
Jan - Apr 2023

Sep - Dec 2023

Suraj Patel

2B Honours Computer Science Student





surajpatel22.github.io

Technical Skills

C#^ | C* | C++* | Java | Python | SQL^ | Html | JavaScript | CSS | Razor | ARM*/x86/MIPS* Assembly Language | R* | Racket [Lisp]* | Languages:

Turing [Pascal] | Bash*

Technologies: ASP.NET Azure Oracle Databases SQL Server Git Visual Studio Vim* Linux Windows Unity Arduino SSRS

MVC | Testing | Data Structures | Algorithms | Complexity Analysis | OOP | Functional Programming | Design Patterns & Principles | Concepts:

> ETL Pipeline Stored Procedures DB Repositories Memory Management Multiprocessing Pipelining Processor Design Assemblers | Compiler Optimizations | Linking & Loading | Code Generation | Parsing | Text Processing | RSA Encryption | Digital Logic Design [Gates | PLAs | Memory | Finite State Machines]* | Graph Theory*

Work Experience

Full Stack Developer – OkRx

January – April 2021

· Worked on tasks such as developing, refactoring, and debugging various features and pages of a Web Service for healthcare workers

Used Azure DevOps to manage Git repositories and tasks discussed upon during daily team wide scrum meetings lead by the CEO

• Learned to put a greater emphasis on writing simple code due to the nature of working on a Large MVC Codebase

Developed webpages using ASP.NET using Razor for the front end and C#, with database interactions via Repositories, for the back end

Gained experience working in a task-based, Work From Home, Start-Up environment where communication was done via MS Teams

Software Developer – OPGT [Ministry of The Attorney General]

May - August 2020

Completed various individual projects with 1 on 1 remote mentorship with the team lead

• Gained experience working in a 9-5 In-Person environment with Covid protocols

Pay Statement Processing

- Single-handedly created a Multi-Language Process to extract Pay Statement data into a database and process it for a SSRS Report
- Developed a Windows Service with C# and .NET to monitor a network location for new files to validate and process in a database
- Utilised an Event Watcher to monitor a network location and the Oracle Data Provider to communicate between C# and a database
- Efficiently implemented this ETL process in PL/SQL by using Global Temporary Tables and Scalar Subquery Caching

Additional Experience

FIRST Robotics Competition – District Finalists

September 2018 - June 2019

- Worked as part of the Student Run Team #6866 (The Space Invaders) to design, 3D model, build, and compete with a robot
- Collaborated with my team through GitHub during the process of designing the 3D model of the robot assembly with SolidWorks
- · As a team, hosted workshops at public libraries to introduce and promote STEM to the youth in our community

YMCA Teen Night Council Member

July 2017 - June 2019

- Responsible for all the programs in the whole YMCA building for 3 hours a week as part of a Council of Volunteers
- In-charge of planning, setting up, and executing the activities for the night
- Gained leadership skills by being in-charge of an entire building full of high school students of the same age group

Breaker Duel - Android Game

Projects

January 2018

- Scripted custom physics using OOP concepts with C# for an Android Game co-developed using Unity's collaboration system
- Got familiar with Google's Play Store Console by publicly Publishing The Game for people to find and play

Awards & Achievements

March 2019 **FIRST Robotics Competition District Finalists**

June 2019 York Region Excellence In Mathematics Award

Canadian Senior Mathematics Competition - Top 3%

January 2017 Intro To Computer Science In Python – Certificate of Completion [codehs.com]

UNIVERSITY OF WATERLOO UNOFFICIAL GRADE REPORT

Suraj Patel 20849665

2B Computer Science, Honours, Co-operative Program

Spring 2021			
CS CS STAT MATH Term Average	240 241 251 231 235 ie:	N/A	Data Structures & Data Mgmt Foundations of Sequential Prog Computer Organization & Design Statistics Linear Algebra 2 (Hon Math) Decision:
Winter 2021			
COOP PD WKRPT Term Averag	2 10 200 ľ je:	VI N/A	Co-operative Work Term Professional Resp in Computing CR Work-term Report NG Decision:
Fall 2020			
CS CS ECON MATH STAT Term Average	245 246 212 239 230 je:	72.2	Logic and Computation 64 Object-Oriented Software Devel 74 Introduction to Game Theory 74 Intro to Combinatorics 79 Probability 70 Decision: Good standing
Spring 2020			
PD COOP Term Averag	11 1 je:	N/A	Technical Writing CR Co-operative Work Term Decision:
Winter 2020			
PD CS ECON MATH MATH PHYS Term Average	1 136 101 136 138 122 je:	75.8	Career Fundamentals CR Elem Alg Design & Data Abstrac 78 Intro to Microeconomics 79 Linear Algebra 1 (Hon Math) 72 Calculus 2 For Honours Math 81 Waves, Electricity & Magnetism 69 Decision: Good standing
Fall 2019			
CS MATH MATH PHYS SEQ SPCOM	135 135 137 121 2 100	4	Designing Functional Programs 92 Algebra for Hons Mathematics 60 Calculus 1 for Honours Math 77 Mechanics 85 Co-op Sequence 2 Interpersonal Communication 73
Term Average: 77.4 Decision			Decision: Good standing