

# Masroor Hussain Syed

masroor.syed@ucalgary.ca | 403.483.3651 | suroor.23@gmail.com

## EDUCATION

### UNIVERSITY OF CALGARY BSc (HONOURS) IN COMPUTER SCIENCE

Faculty of Science  
Cum. GPA: 3.73 / 4.0  
Major GPA: 3.8 / 4.0

## LINKS

Website:// [Masroor-Syed](#)  
Github:// [Masroor-Syed](#)  
LinkedIn:// [masroor-hussain-syed](#)

## COURSEWORK

### UNDERGRADUATE

Database Management Systems  
Data Science  
Software Engineering  
Design and Analysis of Algorithms  
Principles of Computer Security  
Network Security  
Web-based Systems  
Computer Networks  
Introduction to Distributed Systems  
Operating Systems  
Computing Machinery I/II  
(Teaching Asst Winter 2020)

## SKILLS

### PROGRAMMING LANGUAGES

Python • Java • C/C++ • HTML/CSS •  
Javascript • Haskell • ARM Assembly •  
PHP • LaTeX

### LIBRARIES & FRAMEWORKS

React.js • Node.js • Express.js •  
MongoDB • MySQL • Socket.io  
Pandas • NumPy • Matplotlib • Tensorflow  
Git • WebStorm • IntelliJ • Wireshark •  
Eclipse • Visual Studio • Vertica DB •  
Tableau • Open Refine

## EXPERIENCE

### TEACHING ASSISTANT FOR INTRODUCTION TO DISTRIBUTED SYSTEMS (CPSC 559) | UNIVERSITY OF CALGARY

Jan 2020 - Present | Calgary, AB  
Supporting students on their class projects. Corresponding daily with students via email and office hours. Responsible for grading student projects.

### INSTRUCTOR | ICOMPUTE PROGRAM

Sept 2019 - Present | Calgary, AB  
Teaching children how to solve problems, think creatively and express themselves through programming in Scratch and MIT App Inventor.

## RESEARCH

### STATIC ANALYSIS OF THIRD PARTY ANDROID SDKS | UNDERGRADUATE HONOURS RESEARCH PROJECT

Sep 2019 – Apr 2020 | Calgary, AB  
Developing an automated static analysis tool to help evaluate the usage of cryptography by third party Android SDKs using backward data-flow analysis.

### NETWORKS RESEARCH GROUP | (PURE) RESEARCH STUDENT

May 2019 – August 2019 | Calgary, AB  
Worked under the supervision of **Dr. Carey Williamson** to create tools to detect periodic and quasi-periodic network traffic on the University of Calgary edge network.

## PROJECTS

### QUICKSPLASH | MULTIPLAYER GAME BUILT USING MERN STACK.

Created a multiplayer party game using the MERN (MongoDB, Express, React.js, Node.js) stack. Implemented the front-end and integrated front-end with back-end. Designed and connected the database with the app. Performed smoke test to make sure our build was deployable.

### GRYD | ANDROID APP FOR EVENTGOERS

Created an android app to help eventgoers navigate events and schedule their day at events. Developed a business plan for a software-based business venture.

### RAID FILE SYSTEM STORAGE | DISTRIBUTED SYSTEM FOR FILE STORAGE

Helped in ideation and creation of a distributed RAID-style file storage system using Raspberry Pi's. Implemented integrity check for files in the system using cryptographic techniques. Created a network discovery protocol for different component of the system.

## AWARDS

2019 P.U.R.E. (Program for Undergraduate Research Experience) Award  
2019 University of Calgary International Undergraduate Award