Harman Brar

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Github: **harman-brar**
Stack Overflow: **hb22**
Website: **https://harman-brar.github.io/**

EDUCATION

University of British Columbia Vancouver — *B.Sc. Computer Science, Year 2*

September 2017 - May 2021

Relevant Coursework: Program Design, Data Structures, Algorithms, Multivariable Calculus, Linear Algebra, Symbolic Logic, Discrete Mathematics, Elementary Statistics

EXPERIENCE

UBC Sailbot, University of British Columbia— *Software Team Member*

September 2018 - Present

- Developing a web application using **Node.js/Express & React** that will receive, store, and display data produced by an autonomous sailboat, as well as push waypoint and speed commands to the sailboat

Momose Laboratory (Physical Chemistry), University of British Columbia — *Research Assistant*

May 2018 - September 2018

- Developed **Igor** scripts to automate quantification of data from various programs, such as **SIMION**, taking seconds instead of hours.
- Designed ion optics configuration to optimize detection of ammonia molecules in a microwave trap cavity
- Studied and began work on adapting an evolutionary algorithm in **C++** to local Zeeman Decelerator configuration to increase phase space density by up to 40%

GS Software Development, Surrey BC — *Software Development Intern*

June 2018 - August 2018

- Developed an Android/iOS parent-school staff communication application, that also displays student grades and attendance, using **React Native**

Turfco Landscape Supply Inc., Richmond BC — *Technologies Manager*

May 2017 - April 2018

- Solely built the company's [web presence](), inventory tracking, invoice, and account management systems using **HTML/CSS/JavaScript** and **Java**

PUBLISHED INDIVIDUAL PROJECTS

- **Alfred - Android Assistant** (Android) ~ April, 2018 ~ [Link]()
- **PaddleBall** (Android) ~ December, 2017 ~ [Link]()
- **NETBOOKLET** ~ January, 2019 ~ https://www.netbooklet.com/
- **Punjabi Keyboard** ~ May, 2016 ~ www.punjabikeyboard.co.nf

EXTRACURRICULARS

Surrey Knights Junior Hockey (PJHL)
- September 2016 to March 2017

BipTech Developer - *Developed InnovateBC app for Ministry of Education*
- December 2016 to May 2017

Co-President - Burnaby South Programming Club
- September 2016 to June 2017

Affiliated Player - Langley Knights (PJHL)
- October 2015 to March 2016

BWC Midget AAA Hockey
- August 2015 to March 2016

SPOKEN LANGUAGES

Punjabi

Hindi

Urdu