Harman Brar

Relevant Links

stackoverflow: hb22

GitHub

: harman-brar / (hb22)

EDUCATION

University of British Columbia, Vancouver BC — B.Sc. Computer Science

September 2017 - May 2021

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

EXPERIENCE

UBC Sailbot, University of British Columbia — Software Team

September 2018 - Present

Developing an API in **Node.js/Express** that will receive and store data produced by an autonomous sailboat, as well as push waypoint and speed commands to the sailboat

Momose Group, University of British Columbia — Research Assistant

May 2018 - September 2018

- Worked on adapting an evolutionary algorithm in C++ to local Zeeman Decelerator configuration to increase phase space density by up to 40%
- Developed **Igor** scripts to automate quantification of output of certain programs from taking up to a couple of hours to less than a second
- Designed ion optics for the detection of ammonia molecules in a microwave trap cavity

GS Software Development, Surrey BC — Software Development Intern

June 2018 - August 2018

• Developed an Android/iOS parent-staff communication application using React Native

Turfco Landscape Supply Inc., Richmond BC — Technologies Manager

May 2017 - April 2018

Solely built web presence, inventory tracking, invoice, and account management systems using HTML/CSS/JavaScript and Java

Published Individual Projects

- Alfred Android Assistant Link
- PaddleBall (Android) Link
- www.turfcolandscape.com (Block and Paver calculators in 'Products')
- www.punjabikeyboard.co.nf

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Extracurriculars

Surrey Knights Junior Hockey (PJHL)

- September 2016-March 2017

Co-President -**Burnaby South Programming Club**

- September 2016-June 2017

Affiliated Player -Langley Knights (PJHL)

- October 2015 to March 2016

BWC Midget AAA Hockey

- August 2015 to March 2016

LANGUAGES

Punjabi

Hindi

Urdu

* references available upon request