

JAGVIR DEHAL

SOFTWARE DEVELOPER

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Skills

LANGUAGES

Python

Node.js

JavaScript

C

C++

C#

MySQL

MariaDB

PHP

BF

SOFTWARE

Linux

Git

GitHub

Tensorflow

Apache

LAMP

SSH & FTP

Bash/Shell Scripting

NMAP

RTMP

HARDWARE

Arduino

Raspberry Pi

Custom PC

OTHER APIS AND TOOLS

React Native

Vue.js

Android Studio

Microsoft Azure Cloud

AWS

Bootstrap

Nimble Streamer

CentovaCast

HACKATHONS

StarterHacks 2020

Hack the North 2019

ETHWaterloo 2019

VikingHacks 2019

PCHacks 2019

WolfHacks 2018

Hack the Hammer 2018

UofT Local Hackday 2017

Summary of Qualifications

- 5 years of Python experience with projects and competitions
- Proficient with C/C++ and experienced working with Java
- Excellent collaboration in a fast-moving, team environment; demonstrated by 14 time-limited, team-based competitions and events
- Very comfortable with Unix/Linux environments
- Quick learner, demonstrated by learning enough Node.js to create a web scraping app in an afternoon

Relevant Projects

Keystone Tutoring

Apr. 2019 - June 2019

- Web app that connects students with tutors from their school
- Gives senior students an opportunity to earn volunteer hours by tutoring younger students
- Created using Node.js, MySQL, and other JS libraries

Braille Box - Hack the North

Sept. 2019

- Produces tactile Braille characters given any kind of text input
- Characters are produced by rotating two seven-sided wheels, where each face has a combination of three raised bumps
- Programmed in C++ and created using an Arduino, servo motors, and ultrasonic sensors at Hack the North

BF Language Interpreter

Jan. 2020 - Present

- Reads BF code from a text file and produces output
- Currently working on a code visualizer and debugger
- Created using Python

University Webscraping App

Dec. 2018

- Web app that scrapes and centralizes admission information for Ontario Universities
- Developed for the purposes of learning Node.js and informing peers
- Created using Node.js, EJS and Promise

Turtle Pong

Nov. 2016

- Fully functional pong game built using a very basic drawing library
- Developed to test how far Python's Turtle library could be pushed
- Created using Python and Turtle

Relevant Experience

Radio Dil Apna Punjabi ·

Sept. 2015 -

Systems Administrator and Technical Backbone

Present

- Setup and managed VPS servers using Debian Linux; reduced monthly server costs by 60%
- Migrated software to open source alternatives following extensive research and analysis; reduced licensing costs by 90%
- Regularly maintained and updated software using SSH and FTP to ensure stability and security

Viking Hacks · Lead Organizer

May 2019

- Organized a Hackathon for students with little technical experience and gave them an introduction to logic and programming
- Worked with a team of 6 senior students and staff to ensure the Hackathon would run smoothly

StarterHacks · Mentor and Judge

Jan. 2020

- Guided a group of inexperienced programmers in creating a facial recognition app using Python and OpenCV
- Mentored groups with unfamiliar programming languages and environments

Computer Science Club · President

Sept. 2017 - June 2019

- Hosted weekly club meetings to prepare students for programming competitions and to work on club projects
- Divided roles and responsibilities among executive members; had more than 60 members

Additional Projects/Experience

Dragons Nest Finale Runner-ups	May 2019
<ul style="list-style-type: none">Keystone Tutoring app was presented to a panel of high-level business executivesWon 2nd place for our outstanding pitch and demo	
FishFinder	Feb. 2018
<ul style="list-style-type: none">Machine learning app that classifies types of FishCreated using Tensorflow and Google Cloud APIsCreated during Hack the Hammer 2018	
Canadian Computing Competition (x4) University of Waterloo	Feb. 2016 - Feb. 2019
<ul style="list-style-type: none">Five computing challenges to complete over 3 hoursPython was the primary programming language	
ECOO Programming Contest (x4) Peel District School Board	Mar. 2015 - Mar. 2019
<ul style="list-style-type: none">Four team-based computing challenges to completePython was the primary programming language	

Awards

North Park Secondary School · Engineering and Applied Sciences Award	June 2019
<ul style="list-style-type: none">Awarded for my excellence in the field of Engineering and Applied Sciences	
ECOO-CS · 3rd Place Regional Champion	Mar. 2019
<ul style="list-style-type: none">Demonstrated leadership, coordination and time-management skills in this team-based programming competitionRanked third place in the Peel District School BoardFirst team from North Park S.S. to rank in the top 10	
University of Waterloo · Waterloo Math School Champion (x4)	
<ul style="list-style-type: none">Ranked first place in my school for Waterloo's math contests	
University of Waterloo · Waterloo Awards of Distinction (x4)	
<ul style="list-style-type: none">Ranked among the top 20% in Canada for Waterloo's math contests	

Education

University of Waterloo BCS Computer Science 2024	Sept. 2019 - Present
North Park Secondary School International Business and Technology Program	Sept. 2015 - June 2019