SHEIKH ABRAR TAHMID

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SKILLS

Languages Java, JavaScript, HTML, CSS, C, C++, Python

Tools Eclipse, Android SDK, JavaFX, Swing, Node.js, Electron, Git

EXPERIENCE

Programmer and Team Captain

Sep 2014 - June 2018

FIRST Robotics Competition Team 5036, Toronto, ON

- Effectively led 20-person team to create an industrial-sized robot each year (video of 2018 robot: http://bit.ly/2Erz5qW)
- Programmed robots using Java and the WPILib API, implementing advanced object-oriented programming and robotics control concepts
- Oversaw all aspects of team, including design, software and fundraising, during last 2 years with team

Software Developer and Robot Designer

July 2017 - Aug 2017

SMARTWheel Canada, Burlington, ON

- Designed and constructed a human-sized robot mascot for a hoverboard retailer
- Programmed Java app deployed on Windows tablet to act as robot's face using Swing, FreeTTS and socket libraries
- Programmed Android app to remotely send commands to robot over Bluetooth, making it talk and change its expression

Robotics Instructor

July 2018 - Aug 2018

Bot Camp, Toronto, ON

- Mentored students on how to design, build and program robots using the VEX IQ platform
- Introduced programming concepts including loops and conditional statements as well as various real-world robotics mechanisms

PROJECTS

Laptop Guard Java, JavaFX, JavaMail, C, WinAPI

http://bit.ly/2EFnLcr

A Java desktop security app that sounds an alarm when a user's laptop is unplugged and sends a notification to the user's email

Robotics Competition Scouting App Java, Swing

http://bit.ly/2T9C15P

An internal tool used by robotics team in the form of Java app used to make recording and analyzing performances of robots at competitions easier

Word Matching Game *Java, Android SDK*

http://bit.ly/2NEoD3U

A brain-training game with over 250 downloads where players must match word pairs hidden in an array

Boxie Vs. the World Java, jMonkeyEngine

http://bit.ly/2VvQQfQ

A 3D game for the PC where the user controls the character, Boxie, to collect coins and jump from platform to platform

Pong Desktop App JavaScript, HTML, CSS, Node.js, Electron

http://bit.ly/2HaTCDk

An implementation of Pong using Node.js and Electron where the player competes against a computer-controlled opponent

AWARDS AND ACHIEVEMENTS

Innovation in Control Award March 2018

FIRST Robotics Canada

Earned robotics team award by programming software for robot to perform autonomous tasks using PID loops and multiple sensors

Qualified for FIRST Robotics World Championships April 2017, April 2018

FIRST Robotics Canada

Captained robotics team to secure 2 consecutive World Championship berths

Principal's Award for Student Leadership June 2018

Sir Wilfrid Laurier C.I

Recognized for demonstrating strong leadership ability on school's robotics team

EDUCATION

Bachelor of Computer Science

Sep 2018 - present