SHEIKH ABRAR TAHMID

Candidate for Bachelor of Computer Science - University of Waterloo, Class of 2023

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SKILLS

Languages	Java, JavaScript, HTML, CSS, C/C++, Python
Tools	Android SDK, JavaFX, Swing, Node.js, Electron, Git

EXPERIENCE

Programmer and Team Captain   Sep 2014 - June 2018
FIRST Robotics Competition Team 5036, Toronto, ON

- Managed 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 object-oriented programming and advanced control concepts
- Oversaw all aspects of team, including design, software and fundraising, during last 2 years with team

Robotics Instructor   June 2018 - July 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

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 using Swing library and socket programming deployed on a Windows tablet to act as the robot's face
- Programmed an Android app to remotely control the face over Bluetooth, making the robot talk and change its expression

PROJECTS

Laptop Guard *Java, JavaFX, JavaMail, C, WinAPI*   http://bit.ly/2EFnLcr
A Java desktop app that sounds an alarm when a user's laptop is unplugged and sends a notification to the user's email

Quantitative Data Analysis App *Java, Swing*   http://bit.ly/2T9C15P
A Java desktop app used to make recording and analyzing robot performances 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

3D Platformer Game *Java, jMonkeyEngine*   http://bit.ly/2VvQQfQ
A PC game where the user controls the character, Boxie, to collect coins and jump from platform to platform

Pong Desktop App *JavaScript, Node.js, Electron*   http://bit.ly/2HaTCDk
An implementation of Pong using Node.js and Electron where the player competes against an AI 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

Qualifier 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