# Nizar Jandal Alrifai

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## **Skills**

- Languages: Java, Python, C/C++, basic JavaScript.
- Web-Dev: HTML5/CSS/JavaScript for web-design.
- Hardware: Arduino, Raspberry Pi.
- App Development: Android Studio.
- Libraries/Tools: Android Studio, Digital Ocean, Bootstrap, Libgdx, Pygame, OpenCV, and many more.
- Programming Software: IntelliJ, Eclipse, Clion, PyCharm, Sublime Text, Atom, GitHub.

# **Key Projects**

### **Mini-Games Bluetooth Mania**

- Developed a series of entertaining multiplayer visual Java games using Libgdx.
- Games include: A special Space Invaders, Frogger, a luck-based game, a Memory game, and rope swinging.
- Used android studio to create an app to allow for phones to be used as controllers.
- Using Sockets, I established a connection between the devices (the laptops and phones) to a Digital ocean server.

#### **Seize-Control**

- Created a Google Chrome extension to filter potential seizure inducing YouTube videos in a team environment.
- Used OpenCV, Firebase, Pytube, HTML and CSS (to design the extension).
- Used Python to process pixels on every frame and analyze them using complex mathematical algorithms.
- Used JavaScript to model some of the data acquired to the user.

#### Panium-RPG

- Collaborated with a partner to create a fully-fledged RPG in Python and bring it to life with Pygame.
- Used Tiled to create interactive, multi-layered maps and rooms for the user to explore.
- Play as one of 2 playable characters, and encounter various NPCs, as well as over 20 unique enemies.
- Used file IO to allow for the users to save their progress and continue their adventures at any point.

# **Experience**

**Day Camp Supervisor/Front-End Web Developer** – Canada South Science City (<u>cssciencecity.com</u>) – Windsor ON July 2019-September 2019

- Took initiative to rebuild website from scratch for the organization using HTML, CSS, JavaScript, and Bootstrap providing a more informative, and easier to use website.
- Renovated the building and created and opened many new exhibits to the public.
- Created various interactive activities for the tours and kids enrolled in our camp.

Co-founder and Instructor – CodeReach (codereach.ca) – Windsor, ON

### September 2017 – June 2018

- Co-founded a brand-new initiative to teach grade school students the programming language Python.
- Co-operated with over 10 other team members to teach over 70 students Python fundamentals as well as Pygame.
- Gained local attention, appearing in the news alongside the mayor, acquiring over 100 applications the next year.

### Vice President and Member- Debate Club-Windsor, ON

### September 2016 – July 2019

- Award winning debater who competed in various debate competitions.
- Held meetings and managed over 70 members on a weekly basis.
- Organized various local debate tournaments for high schools in the Windsor-Essex area.

### **Education**

Candidate for BASc in Computer Engineering, University of Waterloo, Waterloo, ON

2019 - 2024

- Elected as 1 of 2 Engineering Society representatives from a class of 160 students.
- Relevant courses include:
  - o ECE 150: Introduction to programming.
  - o ECE 124: Digital circuits and systems.