

# Nizar Jandal Alrifai

☎(519)-996-7401 | ✉[njandala.uwaterloo.ca](mailto:njandala.uwaterloo.ca) | 👤 <https://saber74.github.io> | 📄 <https://github.com/Saber74>

## 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 remote 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.
- Created and gathered various sprites, to allow for the creation of 2 playable characters, many NPCs, as well as a selection of 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 ([cssciencecity.com](http://cssciencecity.com)) – 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](http://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

- Relevant courses include:
  - ECE 150: Introduction to programming.
  - ECE 124: Linear circuits.