# RYAN DENG

**2A Software Engineering**

(226)-606-6169
y95deng@uwaterloo.ca
www.github.com/ryandeng32
www.linkedin.com/in/ryandeng32
www.ryandeng.me

## Skills:

**Languages:** Python, JavaScript (ES6), HTML5/CSS3, C, C++

**Technologies:** Node.js, Express, React, Redux, MongoDB, Socket.io, Git, Bash, Agile (Scrum)

## Work Experience:

Co-founder at Refinest under Enterprise Co-op Initiative 2020.05 – 2020.08

- Completed indepth training in **entrepreneurship** and **problem analysis** at the **Conrad School of Entrepreneurship** and **Business**
- Worked in a team of two **autonomously** thoughout the work term following the **Agile workflow**
- Researched the **billion-dollar problem** of "Creativity tools" in partnership with the **Problem Lab** at the University of Waterloo
- Scripted and designed the pitch deck and achieved **finalist** spot in the **Quantum Valley Investments Problem Pitch Competition**.

## Projects:

**Challengers** | MERN stack, Redux, JSON Web Token (JWT), Bcrypt 2020.07 – 2020.08

- Built and deployed a **full-stack web app** that facilitate **employee engagement** by making organizing challenges more efficent and more scalable.
- Created the frontend and backend using the **MERN stack** with **Redux** for global state management.
- Implemented **user authentication** and **authorization** using **MongoDB**, **JWT**, and **Bcrypt**.

**IdeaConnect** | MERN stack, Socket.io 2020.07 – 2020.08

- Built and deployed a **full-stack web app** that helps people with ideas connecting to others via built-in chatrooms.
- Designed, and implemented the app using the **MERN stack**.
- Achieved **real-time chating** using **Socket.io**.

**Top Down Zombie Shooter** | Python, PyGame 2019.04 – 2019.07

- Developed a top-down **tile-based** game using **Python** with the **PyGame** library which implemented various game design elements such as music, animation, player inventory, and a level-up system
- Implemented an algorithm that enables zombies to chase the player while keeping a distance between themselves

**3D Pong** | Python, VPython 2019.02 – 2019.03

- Developed a **3D** version of the classic game Pong using **Python** with the **Vpython** library which implemented an AI opponent and multiplayer support

## Activities & Interests

Programming Lead of the FIRST robotics team 7022 2017.09 – 2019.06

- Designed and coded a robot that finished with a result of **top 25%** in the Ontario District in 2018

Core Member of the Math Contest Team 2015.09 – 2019.06

- Participated in school board (WCDSB)'s math competitions and acquired **three times champion**.

## Education:

University of Waterloo Waterloo, ON

Candidate for Bachelor of Software Engineering, 2A Software Engineering 2019.09 - Present