MARKO RENIC

✉ mrenic@uwaterloo.ca   📞 +1 832-312-6859   in markorenic   ⌂ markorenic

EDUCATION

University of Waterloo · Sept. 2020 to June 2025
B.S. Software Engineering
CGPA: 3.87 | Presidential Scholarship (+95% Admission Average)

Stanford Online Machine Learning Course @Coursera · May 2020 to Aug. 2020
Grade Achieved: 96.08%

SKILLS

TECHNOLOGIES: Python, OpenCV, C/C++, Git, JavaScript, PHP/MySQL
OTHER SKILLS:
Hardware: I have been assembling custom PCs for 5 years and have a deep understanding of individual PC components.,
Adaptability: I have lived and studied in 5 countries and had to adapt to a new curriculum and environment each time.,
Time management: In High school I played varsity soccer and lead a programming club, alongside challenging IB courses.

WORK EXPERIENCE

Cemex Croatia
Summer Intern · June 2018 to July 2018 · Split, Croatia
- I **optimised** the **virtual machines** and increased uptime by 10% by reconfiguring the CPU and memory allocation to maximise hardware potential.
- This was done while supporting the in-house IT team in an industrial facility by monitoring the systems and completing hardware related field work if required.

Seeway Tanzania
Volunteer Group-leader · Arusha, Tanzania
- In 2017 and 2019 as a **group-leader**, I lead a group of **international students** in community work organised by Seeway.
- Where we **installed solar panels** and lighting in 8 homes and 2 school, to give students the opportunity to study after sunset sustainably.

SELECTED PROJECTS

Autonomous Car with GPS-like navigation
- Technologies used: C#, Python, OpenCV, Tensor flow, Arduino, Raspberry Pi
- A model of how an **autonomous car** can be directed by a satellite using **computer vision** to optimize the path taken by vehicles.
- Used **OpenCV** for **real-time detection** of the car and obstacles which is then localized and a **A* algorithm** is ran to find the shortest path which is translated into C# using a translation script and sent to the vehicle.

Online Multiplayer Pac-man
- Technologies used: GoLang, Web sockets, JavaScript, p5.js, HTML, CSS
- A multiplayer web-app able to run multiple instances of the game in parallel due to the implementation of multithreading.
- The server utilizes **multi-threading** and **gorilla-WebSocket** and the tiles are 8-bit integer so collisions are handled through **bitmasks**.

Educational web-app about the Stock Market
- Technologies used: Python, AWS, Streamlit, TensorFlow, Keras   Current Demo Link **:** stocks.renic.xyz/
- An **interactive** web-app utilizing where users can **visualize real-time stock indicators** (SMA and MACD) on any stock's historic data, and create their own custom **neural-networks** to train the model for **future price prediction** and visualize the results as well as grade the performance without any code.
- The neural-network for prediction backend is implemented using Keras LSTMs and Dense layers which the **user can customize** using the interface.