# Yousof Hosny

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# EDUCATION

# University of Waterloo

Waterloo, ON

Hons. BMath Computer Science, Minor Pure Math (Cumulative GPA: 90%)

September 2019 - May 2023

• President's Gold Scholarship - Admission scholarship \$4,000

# SKILLS

Languages: Python, C++, Go, JavaScript, Scheme, R, Lua

Tools: Git, Docker, Kubernetes, Linux / GNU Tools, NVim, Visual Studio

Libraries: PyTest, GTest, Svelte, Node, Pygame

# EXPERIENCE

# Demonware - Activision

May 2021 – December 2021

Remote - Vancouver, BC

Software Developer Intern

- Developed, tested, and deployed REST API based web services using **Python** and **Kubernetes** serving over 4 million concurrent users, handling online services for all Call of Duty titles
- Developed and tested client code in C++ serving all Call of Duty Players on PC, Playstation, and XBox consoles
- Released new moderation service to handle all toxicity moderation of Warzone and new Call of Duty titles handling over **300k unique reports daily** with average queue size of **1 million reports**, integrating with Redis DB and external profanity filtering services.
- Supported existing and upcoming Infinity Ward titles' online services by debugging via trace logs in **Kibana**, metric analysis / dashboard creation in **Grafana**. Added telemetry to services to integrate with data science teams
- Deprecated existing monolith service into micro services eliminating over 30k lines of code and adjusted CI/CD
  Jenkins pipeline for image building/release and unit/integration testing. Monitored and debugged deployments
  via kubectl

# University of Waterloo

January 2021 - May 2021

Teaching Assistant

Waterloo, ON

• Marked student assessments for MATH138 (Calculus II), guided students' solution and proof clarity

# The Product Initiative - ConnectEd

July 2020 – Aug 2020

Software Developer - Full Stack

Toronto, ON

- Worked in Agile environment to rapidly develop and showcase app matching students based on common interests
- Developed prototype app using serverless stack with React Native and Firebase cloud services

# 3D Diagnostix

July 2018 – Aug 2018

Web Developer Intern

Remote - Boston, MA

• Created a mobile friendly (HTML/CSS) table for in-house CRM used by employees to view client information

## Projects

#### Straights Card Game $\mid C++$

- Object oriented implementation of Straights card game with use of MVC and Strategy design patterns
- Adhered to RAII principles through use of smart pointers and STL containers and algorithms

#### FindiPie | Svelte, Go

- Web app for better exploration of user created playlists on Spotify offering deeper insights than native experience
- Designed with a decoupled front-end and back-end via RESTful API design

# Proust - Small Proof Assistant | Scheme (Racket)

• Project for CS245e (enriched logic and computation), course material aided the development of a proof assistant based on lambda calculus and the Curry-Howard correspondence

### Conway's Game of Life $\mid C++$

• Object Oriented implementation of Conway's game of life using **Observer** design pattern. Allows for both text-based and graphical interface simultaneously using multiple observers.