# Deric Huynh

### **EDUCATION**

## Northern Alberta Institute of Technology

2022 - 2024

Computer Engineering Technology (3.9 GPA)

Edmonton, AB

• Designed and implemented full stack applications through web development, software development, embedded systems development, electronic design, PCB design, PLC programming and database design/management.

#### **WORK EXPERIENCE**

## Centre National de Cyclisme de Bromont

2021

Appariteur

Bromont, QC

Executed customer service operations and physical labor at a prominent bike trail company in French, obtaining a
foundational comprehension of workplace protocols and enhancing proficiency in cross-cultural communication.

## PERSONAL PROJECTS

- Fielded the creation of a user-friendly website interfacing with smart home devices; utilized Svelte and Tailwind CSS to design an intuitive frontend with page load times less than 60ms on average.
- Implemented a secure RESTful Backend API in C# on ASP.NET using the standard Model-View-Controller (MVC) design pattern. Reduced the services CPU usage by 80% through event driven API access.
- Co-developed a comprehensive smart home system by programming Pi Pico's to function as smart light, light switch, air quality sensor, and filtered fan devices; integrated via the MQTT protocol. Devices have a device-todevice latency of less than 400ms on average.
- Hosted and configured critical services for a Smart Home System using Kubernetes, creating scalable deployments with reusable YAML files, reducing service update times to 3 seconds with zero downtime.
- Designed optimized and secured multi-stage docker files, using Google's distroless base-image and separating the production dependencies from build dependencies, reducing the scaling docker image size by 20%.
- Implemented a clone of 'Asteroids' using Java and JFrame on the Eclipse IDE using OOP standards resulting
  in consistent showcases in W.P Wagner's open houses.
- Made a resizable maze game with 4 different selectable algorithms in Java using JFrame.
- Created a chess game with an AI, fog of war and a replay function in Visual Basic.

## PERSONAL ACTIVITIES

- Pursued 2 years of Junior achievement, designing, manufacturing, and marketing products as a small business.
- Actively participated in Edmonton Advanced Toastmasters club since November 2023, showcasing exceptional speaking abilities in delivering workshops and speeches; consistently earning praises and accolades from senior members for outstanding performance.
- Managed a home lab that was hosting game servers, including a cisco switch, a Dell PowerEdge r730, a patch panel and a UPS on a 42U rack. Managed the Dell server using IDRAC 8 through the management port.

#### **SKILLS**

- **Skills:** C#, C, Java, Python, HTML, CSS, JS, PHP, Svelte, React, Tailwind CSS, Docker, Kubernetes, Visual Basic, IDRAC, KiCad, Multisim, Ultiboard, Cisco, SQL, Zero Trust, DNS, French, English
- Certifications: Standard First Aid & CPR/AED Level C