

# HAI HOANG

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## PROJECTS

### City Explorer - *Interactive Tourism Map with Routing Functionality*

#### Personal Project

- Developed full stack web application using Django framework with OpenStreetMap API, Nominatim geocoding, Overpass API for real-time filtering and visualization of tourist attractions.
- Utilized OpenRouteService API to enable users to input multiple locations and generate optimized routes, exploring attractions efficiently.
- User-friendly and dynamically interactable interface with Bootstrap 4, Django Crispy Forms, and Folium powered map.

### Habit Tracker - *Collaborative Task Management Android Application*

#### University Project

- Developed a habit tracker Android application with task management, repeat scheduling, and privacy controls.
- Integrated Google Firebase backend for user registration, login and logout with real-time task sharing among teammates.
- Gained valuable experience in UI/UX design, user storyboarding, and weekly progress reporting with a mentor.

### Custom Neural Network - *Iris Classification in Python*

- Developed a custom neural network in Python, implementing activation functions (ReLU, sigmoid, tanh) and MSE loss.
- Achieved an impressive mean squared error of 0.000001 when trained and tested on the Iris dataset.

## VOLUNTEERS

### Event Setup Assistant - *nathACKS 2022*

*NeurAlbertaTech*, June 2022 - August 2022

- Contact data entry - researching, compiling and organizing contact data into spreadsheets.
- Assist in drafting emails and reaching out to Professors, Medias and Newsletter.
- Classroom talk presentation for introduction to nathACKS 2022.

### Event Setup Assistant & VIP Entrance Attendant - *Edmonton Craft Beer Festival*

*Alberta Beer Festivals*, June 2022 - June 2022

- Assisted with general decorations, setting up tables and chairs.
- Welcome patrons, distribute promotional materials and scan VIP tickets.
- Direct and provide support for patrons during the event.

### Concession Attendant - *Freewill Shakespeare Festival*

*Alberta Beer Festivals*, June 2022 - June 2022

- Assisted in the setup and maintenance of the concession stand.
- Successfully sold various items and consumables to festival patrons while efficiently restocking the stand's inventory.

## EDUCATIONS

### University of Alberta - *Edmonton, Canada*

September 2019 - April 2023

- Bachelor of Science with Specialization in Computing Science (GPA 3.625/4.0).
- Dean's Honor Roll (2019 - 2023).
- Undergraduate Scholarship (2020).
- International Student Scholarship (2019 - 2021).

### Relevant Courseworks

Introduction to Foundations of Computation, Practical Programming Methodology, Algorithms, Formal Systems and Logic in Computing Science, Computer Organization and Architecture, Basics of Machine Learning, File and Database Management, Introduction to Software Engineering, Introduction to Numerical Methods, Reinforcement Learning, Intelligent Systems, Operating System Concepts, Introduction to GPU Programming.

## SKILLS

### Certificates

- Microsoft Office Specialist for Office Excel® 2013 - *Microsoft* (2016)
- Reinforcement Learning - *Coursera* (2021)

### Skills

- Python, C/C++, Matlab

### Languages

- English, Vietnamese, Japanese