

LENA NGUYEN

SOFTWARE
DEVELOPER



lenanguyen.ca



LenaNguyen



nguyenlena1



lena.nguyen1@uwaterloo.ca

SKILLS

Languages: Javascript, C++,
Python, C#, HTML/CSS, SQL,
GraphQL, Typescript

Frameworks & Tools:

React, Node.js, Express,
Hapi.js, Flask, .NET, AWS,
Firebase, Git, JIRA, Jest,
Cypress, Microsoft Azure,
Numpy, Matplotlib, Keras

Databases: MySQL,
PostgreSQL, Firestore

ACTIVITIES

Product / UX |

UW Alternative Fuels Team,
2019

Co-Head of Experience |

Energy Hacks, 2019 - Present

President | Social Justice,
2017 - 2018

Executive Team |

Peel Environmental Youth
Alliance, 2016 - 2018

International Top 10 Winner |
out of 600, DECA, 2016

EDUCATION

SYSTEMS DESIGN ENGINEERING (BASC)

UNIVERSITY OF WATERLOO | **GPA:** 3.85 | 2018 - PRESENT

- Dean's Honors List - Fall 2018, Spring 2019
- Courses: Digital Computation - C++, Data Structures and Algorithms

EXPERIENCE

FULL STACK DEVELOPER

BONFIRE | SEP 2019 - DEC 2019

- Independently architected and implemented a secure password reset feature with **Node**, **AWS**, and **React**.
- Leveraged **AWS SNS**, **SQS** and **Lambdas** to persist user account changes to databases in different regions.
- Revamped testing infrastructure to **increase code coverage by 200%**.
- Automated the syncing of **thousands of projects** using **JavaScript** and **MySQL** to **increase data accuracy** between databases.

SOFTWARE DEVELOPER

UW BLUEPRINT | MAY 2019 - DEC 2019

- Leveraged **AWS S3**, **GraphQL**, and **Typescript** to implement efficient, scalable **cloud document hosting**.
- Migrated database to use **SQL instead of NoSQL** to improve performance, development time, and code readability. (**Python**, **Flask**, **PostgreSQL**)
- **Reached 500+ users** with the open-source applications developed.

BACK END DEVELOPER

SOULFX | JAN 2019 - APR 2019

- Automated the filtering and onboarding of incoming prescriptions to **decrease prescription fulfillment time by 30%**. (**C#**, **.NET**, **Quartz**)
- Implemented an **observer design pattern** to reduce the update delay of web multiple applications by **30 minutes**.

PROJECTS

AUTONOMOUS CAR AI

PERSONAL PROJECT | GITHUB.COM/LENANGUYEN/AUTONOMOUSCAR

- Developed a **convolutional neural network** using **Keras** and **OpenCV** to classify 43 different street signs with **93% accuracy**.
- Leveraged **behavioral cloning** to train a simulated car to drive on a new track autonomously with **90% accuracy**.
- Supplied **real-time data** to model using **Flask** and **Socket.io**

SAFE.NET

CITIZEN HACKS | GITHUB.COM/LENANGUYEN/CITIZENHACKS

- Won **first place overall** among 150 other hackers.
- Developed a Chrome extension that detects and blocks input fields asking for sensitive information with **JavaScript**.
- Architected a **React** app parent portal to monitor browser activity in real-time. (**Node**, **Firebase**, **Google APIs**)