

# JEFFREY NG

Candidate for B.ASc in Systems Design Engineering | GPA 3.9

University of Waterloo

(647) 771-8718

jc4ng@uwaterloo.ca

jeffrey-ng.me

Jeffrey-ch-Ng

www.linkedin.com/in/jeffrey-ng-022



## Skills

### Languages:

Python

JavaScript

Java

C++

C#

HTML

CSS/Sass

SQL

Jinja/Liquid

### Frameworks & Tools:

Git

React

Flask

AWS/GCP/Azure

Docker

GraphQL

SQL Databases

Neo4j

## Achievements

### First Place

InspireHacks2017 MLH

Localhost Hackday

### Best Overall Solution

University of Toronto

Design Competition

### International First Place

DECA Buying and

Merchandising Operations

Research Event

## Work Experience

### Software Developer | Deloitte | Sept-Present

- Architected a search engine backend with **Flask**, **GraphQL**, and **Azure Cloud** services including **Search** and **Cognitive Services** to parse documents using **NLP** concepts
- Implemented an **AWS** pipeline using an **S3 Bucket**, **Lambda functions**, and **ElasticSearch** with **Kibana** to index and return text documents quickly and efficiently
- Migrated **SQL database** to **Graph database** and experimented with different graph database frameworks including **Neo4j** and **CosmosDB** with **GremlinAPI** on **Azure**
- Created an inverted-index using **Python** to index and rank documents using **TF-IDF**
- Led internal hackathon to develop a **Flask** app which obtains **Pandas** dataframe from **Google Trends API** and renders data dynamically to a user-friendly UI with **React**

### Web Developer | Ontario Institute for Cancer Research | Jan-Apr 2019

- Developed **React** components for the OICR LABS websites using **JavaScript ES6** and **JSX** syntax to access data from the **Redux** store to render dynamically
- Designed responsive **Bootstrap**, **Sass/CSS** templates with **HTML** and **Liquid** syntax on the **Jekyll** static site generator to create quick, secure web pages
- Utilized **Docker** to setup local web environments to develop and test functionality

## Projects

### Eye of Minerva

- Designed an Android app using **Java Android Studio** with the backend hosted on **Google Cloud Platform** using **Python-Flask** self trained **ML model**
- Captures images of American Sign Language and uses the **ML model** to translate images into text and speech

### Digimunne

- Constructed a user-centric web application allowing users to store patient data utilizing the **Django** framework with a **Python** backend **HTML**, **CSS**, and **JavaScript** frontend
- Allowed users to store patient data on an **SQL database** to allow medical professionals to digitally access medical records, reducing needless paperwork

### Physics Simulator Learner

- Produced a modular **Java** GUI application using **Object Oriented Programming**, **Inheritance**, and **Polymorphic Principles**
- Utilized user-friendly simulations explaining difficult fundamental physics principles