

PAULINA GRACE KHEW

SYSTEMS DESIGN ENGINEERING AT THE UNIVERSITY OF WATERLOO

+1 (647) 381 7867

pgkhew@uwaterloo.ca

paulinakhe.me

github.com/Paulinakhe

linkedin.com/in/paulinakhe

TECHNICAL SKILLS

Languages: Python, PHP, JavaScript, Ruby, SQL, C++, HTML

Frameworks and Tools: Flask, Django, Laravel, Slim, Git, Kubernetes, Docker, Jupyter Notebook, PostgreSQL

Libraries: Pandas, jQuery, Bootstrap, SQLite, NumPy, Keras, BeautifulSoup, React, Pygame, PhantomJS

Awards: Motorola Engineering Scholarship, University of Waterloo President's Scholarship

WORK EXPERIENCE

Shopify

Toronto, ON

Jan – Aug 2021

SOFTWARE DEVELOPER | DOCS AND API LIBS TEAM (Internship + Part Time)

- Contributed to the open-source tools owned by Shopify, including the **Python** Shopify **API library**, the Shopify app **command line interface (CLI)** in **Ruby**, and the Shopify **Django** example application made in **Python**
- Created an open-source **PHP** library that acts as a framework-agnostic wrapper for the **Shopify Admin API**
- Built a sample Shopify **Laravel** application for third-party developers to reference when building applications using the **Shopify Admin API** that performs authentication using **OAuth** and makes **GraphQL** requests

ApplyBoard

Kitchener, ON

May – Dec 2020

SOFTWARE ENGINEER | AUTOMATION TEAM (Internship + Part Time)

- Solely responsible for **OCR** project that processes various documents using **OpenCV** and **Google Cloud Vision**
- Implemented **preprocessing techniques** such as adaptive thresholding, image rotation, and face detection to raise the accuracy of parsing data from passports, IELTS, and Aadhar documents by **over 30%**
- Investigated and **implemented new technologies** by creating technical proposals, user walkthroughs, and demos

ApplyBoard

Kitchener, ON

Sep – Dec 2019

SOFTWARE ENGINEER | AUTOMATION TEAM (Internship)

- Spearheaded a **machine learning** project that performs **sentiment analysis** on incoming emails and flags urgent emails on **FrontApp**, a corporate email platform used by the Customer Experience team
- Worked on an intermediary **API server using Flask** that utilizes **webhooks** to parse and classify incoming emails and **automates** tasks such as updating profiles and sending notes to students on the ApplyBoard platform
- Automated the login, autofill, and submission of applications on various school portals using a **Google Chrome extension** written in **JavaScript** and **jQuery** using student profile information from ApplyBoard.com
- Developed a **React** dashboard to be used by the commissions team that interacts with backend

Fairtax

Oakville, ON

Jan 2019 – Apr 2020

JUNIOR SOFTWARE DEVELOPER (Internship + Part Time)

- Designed, developed, deployed, and tested features for the **Django** GrantMatch app using **Python**
- Created a section on the **PHP** GrantMatch system that dynamically renders website information into a marketing PDF using **HTML**, **CSS**, and **JavaScript** through **PhantomJS**, a scriptable headless web browser
- Performed **data analysis** with **Pandas** and **BeautifulSoup** to scrape and clean data within **Jupyter Notebooks**

CODING PROJECTS

Hack the Valley

Toronto, ON

Feb 2019

OUTWEATHER

- Created a **Python Flask** web application that displays the temperature and the weather conditions from the **OpenWeatherMap API** and suggests outfits and accessories based on the user's location

Byte Academy

New York, NY

Jul 2018

WEB TRADER

- Constructed a **Flask** web application for buying and selling Nasdaq stocks using the **Intrinio stock quote API**
- Employed **SQL** and **Python** to create and update **SQLite3** databases used to store user and transaction data

Other

SPOTIFY PLAYLIST GENERATOR, GITHUB FOLLOWERS CHECKER

EDUCATION

University of Waterloo

Waterloo, ON

Sep 2018 - Apr 2023

BACHELOR OF APPLIED SCIENCE (BASC) IN SYSTEMS DESIGN ENGINEERING

- Learned **object-oriented programming** in **C++** in *Digital Computation* and *Data Structures and Algorithms* courses
- Motorola Engineering Scholarship** – presented annually to one outstanding student entering first year
- University of Waterloo President's Scholarship** – awarded to students with admission averages above 90%

Byte Academy

New York, NY

Jul 2018 – Sep 2018

PYTHON FULL-STACK IMMERSIVE BOOTCAMP

- Successfully completed a 240-hour curriculum of study in full-stack web development program learning **Python**, **SQL**, **Pandas**, **JavaScript**, **Flask**, and **Django** as well as how to navigate the **Linux operating system**