WILLA KONG

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CORE COMPETENCIES
* **Languages and Frameworks:** Python, JavaScript, TypeScript, Angular, React, Redux, Java, C/C++, C#, .NET, SQL, Flask, Selenium
* **Tools and Technologies:** AWS, Docker, Git, PostgreSQL, Bash, Elasticsearch, Ansible, Jenkins
* **Concepts:** Web Development, Machine Learning, Cloud Computing, REST APIs, Relational Databases, Networking, Security, OOP

WORK EXPERIENCES

SS&C – *Full-Stack Developer* Sep 2020 – Dec 2020
* Optimized search functions and queries in PostgreSQL for a knowledge base application by adding indexes and creating stored procedures, resulting in a 20% speedup for searches across all documents
* Implemented a user theming feature for an Angular application by abstracting common styles into a global stylesheet so that clients can immediately customize their own instance
* Integrated the Vault infrastructure into a Java application using Spring to protect secrets used for configuration, thus ensuring maintainability and scalability

IBM – *IoT & AI Developer* Jan 2020 – Apr 2020
* Designed a REST API using Python and Flask that dynamically adds, trains, and recognizes users for facial recognition and implemented it on Paperspace in a GPU-accelerated Nvidia Docker container, halving training time for each user
* Reduced training time for a new user from 1 hour to 5 minutes by creating an intermediate feature cache in HDF5
* Developed a web-based image annotator using React, Redux and Leaflet.js to simplify object classification for business users and allow cross-platform collaboration on the same dataset of images

Genesys – *Full-Stack Developer Intern* May 2019 – Aug 2019
* Created an AWS RDS microservice with serverless lambda functions and CloudFormation to minimize setup time by half
* Composed Ansible scripts, Jenkinsfiles, and Dockerfiles to automate deployment of a Node.js application, reducing manual work

Nielsen – *Software Developer* Sep 2018 – Dec 2018
* Developed a utility in C# that cleans financial data using metadata in Oracle, improving efficiency from a day to 10 minutes
* Used C# and Selenium to scrape flyers from major retailers to reduce manual workload from half a day to 5 minutes
* Filtered and cleaned large financial datasets stored in SQL Server and Oracle, returning a compact CSV within 5 minutes

Morneau Shepell – *System Developer* Jan 2018 – Apr 2018
* Created an integration application that syncs defect data from HP ALM to Microsoft VSTS using C#, .NET Core 2.0, REST APIs and a 3-way merging algorithm to allow for smoother agile scrum meetings
* Designed a UI proof of concept using Bootstrap, Angular 5, and ASP.NET Core that successfully illustrated a new syncing interface

PROJECTS & ACTIVITIES

Undergraduate Research Assistantship – Checker Framework Jan 2021 – Apr 2021
* Integrated a Language Server Protocol (LSP) via a Visual Studio Code extension that dynamically checks for Java errors into a custom IDE for browser and Electron using Theia to avoid creating multiple versions of the LSP for different platforms

Handwriting Autocorrect Feb 2020
* Developed a Python application that parses handwriting with optical character recognition (OCR) and checks for spelling using natural language processing (NLP) and a Solace messaging queue between a Raspberry Pi and a Python server

Chat Server Oct 2018
* Created a chatroom application in Python where users can broadcast messages over the same network
* Gained insight on key networking concepts such as TCP/IP, protocols, sockets, client-server model, and addressing

EDUCATION

University of Waterloo Sep 2017 – May 2022 (expected)
Bachelors of Applied Science (Computer Engineering)
* **Related Courses:** Algorithms and Data Structures, Systems Programming and Concurrency, Computer Networks, Computer Security, Database Systems