Ray Gong

Software Developer (Python/Java/JavaScript)
BSc in Computing Science, University of Alberta



Languages Frameworks Others

Python, JavaScript, Java, HTML, CSS, C++, C, SQL

Django, PyQt5, Svelte, Flutter, Android, Unity, GraphQL, REST, React, Google Firebase, NumPy Heroku, Google Cloud, AWS

Experience

Software Developer at Interface Fluidics

May 2022 - January 2023 Edmondon, AB

- Developed Windows desktop applications with PyQt as an interface for image processing
- Improved efficiency by redesigning workflow for legacy systems for data handling
- Developed automated tools for commercial image analysis using libraries like OpenCV
- Implemented database and data entry automation using Python and $\operatorname{GraphQL}$
- Worked collaboratively with other developers to ensure inter-program compatibility
- Utilized Jira and Bitbucket for project management and version control

Projects

Toneteller (2nd place winner at HackED 2023)

devpost.com/software/toneteller

- Collaborated in a team of six developers to build a React web application that uses sentiment analysis AI to detect the tone of a written text
- Deployed a Python Flask server on Google Cloud Run using Docker
- Developed a Google Chrome extension using the Chrome Extension API that retrieves the sentiment analysis results from the Flask server
- Integrated the sentiment analysis model RoBERTa into the Flask server, which processes requests from the client

Screencap

github.com/goldentoaste/screenCap

- · Developed a GUI with tkinter and implemented image processing with Pillow
- Utilized Windows API to detect global hotkey for taking screenshots
- Implemented image data handling with Pillow for functionalities such as loading, saving, and copying images to clipboard
- Designed a user-friendly interface with customizable hotkeys for ease of use
- Rewrote program in PyQt5 to improve performance, add new features, and achieve crossplatform compatibility

Experimenter

github.com/CMPUT301W21T21-H03/DivineInspiration

- Designed and organized code structure through creation of UML diagrams, user stories, and product backlogs
- Developed a data visualization tool with graphs to display data using MpAndroidChart
- Integrated an interactive map with location markers using Google Maps API to visualize experiment locations
- Implemented backend functionalities for login handling and user identification
- Developed Firebase API handling and designed database structures
- Implemented data collection by scanning barcodes and QR codes using Zxing

Education

BSci Honours Computer Science, University of Alberta

September 2019 - May 2024

Relavent Courses: Software Engineering, Software Process, Web Architecture, Algorithms, Functional Programming, Linear Algrebra, Statistic, Graph Theory, Real Analysis