

Han Le

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Education

York University – Bachelor of Science in Computer Science

May 2023

Experience

Full Stack Engineer (Part-time) (Contract), Tesoract – Toronto, ON

Apr 2023 – Present

- Designed a server-side access control system with Next.js and MongoDB, efficiently protecting user content from unauthorized access by validating, modifying, and propagating permissions across the app
- Architected a file storage service with AWS S3 for the Tesoract app, facilitating file sharing and modification
- Developed a reusable forum component with a Rich Text Editor, allowing discussion on multiple entities
- Improved front-end responsiveness for 8 pages by removing extra HTML elements and applying a fluid layout

Software Technical Support (Part-time), York University SCS – Toronto, ON

Jul 2023 – Present

- Developed a JavaScript and PHP web application to search room availability from two data sources, enhancing information reliability and urgent request response time for 20 active users daily
- Authored an ETL to process data from QLess using Azure Functions, Azure SQL Database, and SQL Data Sync into an on-premise SQL Server database, processing 400+ records daily
- Improved a kiosk app by redesigning 8 UI screens, leading to a 40% increase in user usage per visitor analytics
- Mentored 5 interns by handling tools introduction, addressing codebase questions, and providing training

Front End Developer (Part-time) (Contract), Consultarer – Toronto, ON

Mar 2024 – May 2024

- Collaborated with 2 engineers to build the UI for 2 pages using TypeScript, finishing 2 weeks ahead of schedule
- Designed a time series MySQL schema and 2 REST APIs for the payments database to enable fast data retrieval

Desktop Support Assistant, York University SCS – Toronto, ON

May 2021 – Apr 2023

- Architected an infrastructure automation tool with Google Cloud SDK and Python to deploy virtual machines and auto-correct errors, reducing dedicated weekly workload by 90%
- Engineered advanced features for a browser extension, enhancing user experience with additional shortcuts and quick selection tools, resulting in a 60% reduction in task completion time

Projects

Orches - Spotify playlist optimizer

hanle23.me/orches

- Created a Spotify playlist optimizer web app using Next.js, TypeScript, and Tailwind CSS, deployed onto Vercel
- Implemented a server-side authorization wrapper with NextAuth and Spotify OAuth using JWT strategy, enhancing user experience by automatically refreshing the access token to keep the session alive
- Developed a normalization algorithm using Euclidean distance to compare a track against a playlist by reducing multiple track characteristics to multiple sub-ranges

Plate Saver

github.com/hanle23/PlateSaver

- Achieved 1st place in the MyPalate Inc challenge for McMaster University's DeltaHacks 8 hackathon
- Built a Java mobile app with Google Map APIs to facilitate restaurant leftover donations to shelters

World Data Visualization

github.com/hanle23/WorldBankVisualization

- Led a team of 4 to deliver a desktop app for a capstone project with Java, Maven, and World Bank APIs
- Architected a Model-View-Controller pattern for the core features of the app, with JUnit tests for unit and UI testing to achieve 92% test coverage

Skills

Languages: Python, Java, JavaScript, TypeScript, NoSQL, SQL

Technologies: Next.js, Node.js, Tailwind CSS, AWS, Microsoft Azure, GCP

Databases: MongoDB, Microsoft SQL Server, MySQL