Matheus Duncan

✉ duncanmatheus905@gmail.com   📞 416-903-0422   ⌗ @Matheus-Du   in LinkedIn

🌐 https://matheusdu.dev

Education

Bachelor of Science - Computer Science — University of Alberta   *09/2019 - 04/2024*
- ⇒ **Key Courses:** Practical Programming Methodology, File and Database Management, Software Engineering, Software Process/Product Management, Data Structures and Algorithms, Information Retrieval, Software Quality, HCI, Web Architecture
- ⇒ **Extracurriculars:** University Food Bank, Computer Science Undergrad Society, History and Classics Society

Professional Experience

Jr. Systems Developer — Co-Operators   *04/2023 - 08/2023*
- ⇒ Working within an existing Java insurance system, successfully delivered new features allowing for notes and documents to be linked to insurance claims using Object-Oriented design principles, simplifying the workflow for claim creation
- ⇒ Directed to simplify the management of non-production dev environments, removed the need to manually configure user roles, wrote custom SQL procedures in Oracle SQL Developer, automating the creation of new custom users and eliminating >5 hours of weekly QA work
- ⇒ Working within a Jenkins pipeline, developed unit tests to increase code coverage of new and preexisting features from <60% to >95%

Jr. Systems Developer — Co-Operators   *01/2022 - 01/2023*
- ⇒ Tasked with updating enterprise Java software to a modern cloud-based architecture, utilized OOP design practices and static analysis tools to identify and refactor legacy code to fit modern cloud standards; resolved >150 code issues and successfully launched system to cloud
- ⇒ Given an insufficient alert system for non-critical errors in production, developed a Java Spring program using Splunk webhooks to automatically create JIRA tickets and notify appropriate maintenance teams when errors occurred in production logs, optimizing the team's logging notification system
- ⇒ Collaborated with an Agile team to upgrade a legacy internal monitoring site, developing and deploying a full-stack React web app utilizing a REST API in Java Spring to monitor the status of internal dev and QA environments
- ⇒ Configured a CI/CD pipeline using Jenkins, Nginx, and Docker, allowing the site to serve over 2000 daily users with 99.9% availability over 6+ months of operation

Product Coordinator (Freelance) — The Livia Group   *04/2020 - 08/2020*
- ⇒ Given an excel spreadsheet of shipping information with a large load time, normalized the data and created a CRUD application using Django and SQLite to allow for easy search and updating, reducing load times by 95%

Technical Projects

Pronunciation Practice Hub 🔗
- ⇒ Worked with IlmHub, a local educational non-profit, to develop a greenfield application allowing teachers to assign Arabic pronunciation lessons to students
- ⇒ Worked with stakeholders and a small Agile team to design, develop, and deploy a full-stack web app using React, Django, and PostgreSQL in <4 months
- ⇒ To facilitate deployment to a cloud architecture, developed a CI/CD pipeline allowing for fully-automated building, testing, and deployment, reducing the time spent on manually testing and deploying new features
- ⇒ Successfully deployed the application to cloud using Docker, where it currently serves 750+ students and 20+ instructors

Home Lab Server 🔗
- ⇒ Linux home server built to allow for easy hosting of several web applications, including a media streaming server and personal website
- ⇒ Personal portfolio and blog site hosted on home server using SSL/TLS encryption and an Nginx web server to achieve 0ms Total Blocking Time and a 0.32ms First Contentful Paint
- ⇒ To allow for simple startup and reliability, self-hosted applications all deployed in Docker with caching and localization provided by a Cloudflare CDN

TaskKeepr 🔗
- ⇒ Selected to participate in HackTheNorth 2023 after finishing in the top 5% of 30000+ applicants; built a message summarization app using generative AI in 36 hours
- ⇒ To facilitate the summarization and extraction of key phrases and dates to be displayed in a custom React frontend, configured a CohereAI LLM capable of providing message summarization in Microsoft Teams in <4 seconds
- ⇒ To store AI-generated events and summarized message threads, constructed a serverless SQL relational database that stored summaries to be displayed to a user via a custom Flask API and React UI

Technical Skills

Coding	Java, Python, SQL, NoSQL, Gosu, Prolog, Lisp, Rust
Databases	MySQL, PostgreSQL, MongoDB
Web Dev	Html, CSS, JavaScript, Nginx, Django, Flask, React
Tools	Git, GitHub, Docker, Linux