JEFFREY ADU

FULLSTACK DEVELOPER

CONTACT INFO

Jeffreyadu3@gmail.com
(438)773-3493
Ottawa
linkedin
github.com/Jeffrey Adu
jeffreyadu.com

TECHNICAL SKILLS

Web Development: RESTAPIs
HTML5
CSS3
AJAX
Frameworks/Libraries: React
React Native
Node/Express
Fast API
Crew AI

Programming languages: Python
Java
Javascript
Typescript

Databases: PostgreSQL
MongoDB

Software/Tools: Git
GitHub
PostMan
Render
Pinecone
Supabase
Other: Agile Development
Object Oriented Design

EDUCATION

Computer Programmer
Algonquin College
2024 - 2025

PROFESSIONAL SUMMARY

Full-stack software developer with experience building and maintaining production applications used in real-world environments. Strong background in backend systems, cloud deployment, and application lifecycle ownership—from architecture and implementation to deployment, iteration, and handover. Known for translating loosely defined requirements into stable, scalable solutions, and for working closely with stakeholders to deliver reliable end products.

TECHNICAL EXPERIENCE

Software Developer

Algonquin College | Cheetah Networks

January 2025 - August 2025

- **Problem Addressed:** Enhance the DriveMate Android application to leverage Cheetah Networks' proprietary SDK for LTE/5G network measurements, enabling reliable outdoor and indoor testing without specialized hardware.
- **Development**: Collaborated on implementing Master–Slave device coordination in Java to collect real-time metrics (RSRP, RSRQ, RSSI, SINR, latency) at predefined Points of Interest (POIs). Added support for GPS-based outdoor positioning and indoor floor plan–based testing.
- **Challenge**: Maintain synchronization and accuracy between multiple Android devices during active tests while managing role changes, connection handoffs, and temporary disconnections.
- **Solution**: Designed and implemented Java logic to process SDK callbacks, update the UI in real time via OpenStreetMap, and manage device state transitions within an MVVM structure. Built automated reconnection and test recovery features to ensure test continuity.

Founder & Lead Developer

Genertiaa – LearnlyAI

July 2024 - current

- **Problem Addressed:** Educators spend significant time creating quizzes from course material, leading to inconsistent quality and limited personalization.
- **Development:** Building an AI-powered quiz platform with FastAPI, OpenAI API, CrewAI, Celery, Redis, and Supabase to automate quiz generation, grading, and personalized follow-up questions.
- **Team Challenge:** During the ingestion phase, processing large lecture files in real time caused API delays and blocked other requests, making the system unresponsive under concurrent use.
- **Solution:** Integrated Celery for asynchronous background task execution and Redis as a message broker to offload heavy ingestion jobs from the main API thread. This allows the system to process large documents without slowing down user interactions.

Core Courses: System Analysis and Design
Mobile Programming
Network Programming
Java
Object Oriented Design

BENG
Petroleum Engineering
University of Portsmouth
2018 - 2021

REFERENCES

Jason Mombourquette

Director General at RCMP | Digital Solutions Delivery
LinkedIn:
linkedin.com/in/jasonmombourquette

Sean Kibbee

Cloud and Computing Expert| Microsoft
LinkedIn:
https://www.linkedin.com/in/sean-kibbee-3229284a/

Mobile Developer

CPG- Magnet Logger Application

January 2026 - current

- **Problem Addressed:** The existing academic prototype of the Magnet Logger app exhibited instability across devices, inconsistent role-based permissions, and lacked production-ready architecture and distribution setup. The client required a stable, deployable version suitable for real-world operational use.
- **Development:** Re-architecting the mobile application from an academic structure into a production-ready system using Expo/React Native. Refactoring project structure, improving state management, and enhancing UI/UX flows to meet Play Store and App Store quality standards. Implementing improved role-based access logic and preparing Android APK distribution builds.
- **Challenge:** Debugging inconsistent behavior across multiple Android devices, resolving environment-specific session and permission issues, and transitioning ownership of infrastructure components (GitHub, Supabase, app distribution accounts) to client-controlled environments while maintaining development continuity.
- **Solution:** Designed a cleaner production architecture, isolated unstable components, and introduced structured build workflows for reliable installation and testing. Established a deployment strategy aligned with client-owned credentials and scalable cloud setup, ensuring long-term maintainability and distribution readiness.

Software Developer

ClauseGuard - AI Contract Review

October 2025 - current

- **Problem Addressed:** Legal contracts often contain dense, complex clauses that expose individuals and businesses to hidden risks. Manual review is time-consuming, error-prone, and typically requires legal expertise, making it difficult for non-experts to confidently assess contracts..
- **Development:** Building an AI-powered web platform that analyzes uploaded legal documents and highlights risky clauses, ambiguous language, and missing information. The backend is implemented with **FastAPI** and integrates **OpenAI's large language models** for contextual legal analysis, while the frontend is built with **Vue 3** to deliver clear, actionable insights to users.
- **Challenge:** Ensuring accurate interpretation across varied contract types and legal terminology while minimizing false positives and missed risks. Managing asynchronous AI processing and maintaining a responsive user experience in the frontend also introduced architectural complexity.
- **Solution:** Enhancing analysis accuracy by providing the AI model with relevant legal context during evaluation. Designing an asynchronous backend workflow to handle document processing efficiently while keeping the UI responsive, enabling a scalable and reliable contract review system.