

Jaskeerat Randhawa

647-274-4264 • jaskeerat2520@gmail.com • Markham, ON • [linkedin.com/in/jaskeeratrandhawa](https://www.linkedin.com/in/jaskeeratrandhawa) • github.com/jaskeerat2520

SUMMARY

Full-Stack Developer experienced in end-to-end product delivery, specializing in Python (FastAPI), TypeScript/React, and relational/spatial databases (PostGIS, Supabase). Proven capability in processing multi-source datasets, integrating advanced cloud/AI APIs, and deploying reliable, user-centric cloud applications from the ground up.

EXPERIENCE

D Byers & Associates LLC 2026 to Current

Software Developer - Ohio Oil Well Tracking <https://well-viewer.vercel.app/>

- Led end-to-end development of a geospatial platform tracking orphaned and abandoned oil wells across Ohio's 88 counties as lead developer, using PostGIS, FastAPI, Supabase, and React
- Engineered a high-throughput risk-scoring pipeline that evaluated 110,000+ historical and orphaned wells across Ohio, implementing the USGS Woda et al. framework to weight multi-variable risk profiles including population density, water source proximity, well age, and satellite-detected emissions.
- Built Python ETL pipelines ingesting and normalizing multi-source datasets (ODNR well records, USGS NHD hydrography, HIFLD critical infrastructure, ODOT roads, OSM) into a unified PostGIS schema with sub-second spatial query performance
- Integrated MethaneSAT L3/L4 satellite emissions data via the Google Earth Engine API to overlay methane plume detections on candidate well sites
- Deployed interactive well viewer to Vercel for non-technical stakeholder access at well-viewer.vercel.app

PROJECTS

Rent Solutions - Rental Listing Platform

- Developed a full-stack property management application where landlords can manage tenant records, track rental income and expenses, and view financial reports for a clear overview of their property financials.
- Implemented user authentication with role-based access and persistent data storage to ensure secure, reliable access to landlord and tenant information.
- Used Supabase for the database, auth, and real-time data; built a React frontend with dynamic dashboards for income/expense reporting.
- Stack: React, Supabase
- <https://github.com/jaskeerat2520/rent-solutions>

Quizzzy - AI-Powered Quiz Generation Platform

- Built a full-stack application that allows users to generate interactive quizzes from uploaded PDFs, streamlining content creation for studying and knowledge testing
- Designed a user workflow for uploading documents, generating quizzes, and reviewing answers through a clean React-based interface
- Leveraged AWS EC2 to handle document processing and extraction, enabling reliable handling of user-uploaded files
- Integrated the OpenAI GPT API to transform document content into structured quiz questions and answers
- Implemented authentication, data persistence, and quiz management features using Supabase
- Focused on usability and responsiveness to deliver a smooth end-to-end experience from document upload to quiz completion
- Stack: React, Supabase, AWS EC2, OpenAI API
- <https://github.com/jaskeerat2520/quizzzy>

EDUCATION

Computer Programming and Analysis - Advanced Diploma | *Durham College, Oshawa, ON* Sep 2023 – Apr 2026 • Three-year advanced diploma program with a focus on software development, object-oriented design, database systems, and web development

- Core coursework: Object-Oriented Programming (Java, C#), Database Design (SQL, PostgreSQL), Web Development, Data Structures & Algorithms.