Omer Yousif

AI Application Development

omeryousif.dev@gmail.com | github.com/omerf9
linkedin.com/in/omer-yousif-970a55383/

Software Engineering Technology - Artificial Intelligence student at Centennial College, with expected graduation in December 2027. Interested in Python and AI application development, including document retrieval, language-model API integration and the evaluation of generated answers.

EDUCATION

Centennial College | Expected December 2027

Software Engineering Technology - Artificial Intelligence

PROJECT TECHNOLOGIES

AI application focus: OpenAI API, embeddings, retrieval-augmented generation, cosine similarity

Languages and APIs: Python, JavaScript, TypeScript, FastAPI, REST APIs, React

Data and quality: NumPy, SQL, MongoDB, PostgreSQL, Git/GitHub, Postman

RELEVANT EXPERIENCE

Software Developer — AI & Backend | ElectricBid Pro

Centennial College project placement | July–September 2026

- Implemented AI-assisted proposal draft workflows and Node.js backend endpoints with structured validation and required human review.
- Contributed automated tests, code reviews and fixes in a collaborative Electron/PostgreSQL application.

SELECTED PROJECTS

Lexio [Source]

Document Q&A prototype | Python, FastAPI, React, OpenAI API

- FastAPI extracts PDF text, splits it into chunks and ranks embeddings with NumPy cosine similarity to select context for LLM answers.
- The React Q&A flow returns generated answers with page references from the retrieved document chunks.

CodeAtlas [Source]

Repository analysis prototype | Python, FastAPI, React, GitHub API

- FastAPI retrieves GitHub repository trees and selected files for technology detection and source-code Q&A.
- Selected source content is bounded before it is sent to GPT-4o-mini, keeping repository questions tied to the supplied context.

RELEVANT COURSEWORK

- Perceptron lab: CSV loading, class-label encoding and k-fold evaluation code; adapted educational material.
- C# and Java programming coursework, including input validation and object-oriented design.