

Olalekan Soyewo

SOFTWARE ENGINEER | PAULSOYEWO@GMAIL.COM | <https://github.com/sportynest>

PROFESSIONAL SUMMARY

Accomplished Computer Science senior at York University, excelling in software engineering fundamentals and innovative AI development. Proficient in Python, Java, C/C++, and JavaScript, I've engineered production-ready applications using machine learning and NLP to address complex challenges and deliver tangible business outcomes. With hands-on experience in scalable web services, I'm poised to drive high-impact solutions in dynamic tech environments.

EDUCATION

September 2023 - June 2026

York University, Toronto – *Bachelor of Science (Honours), Computer Science*

GPA: 3.5/4

Relevant Coursework: Distributed Systems, Cloud Computing, Advanced Algorithms, Software Engineering, Database Systems, Operating Systems.

EXPERIENCE

November 2024 - PRESENT

Cognora, Toronto, ON – *Researcher / Software Engineer*

<https://cognora.ca/>

- Spearheaded product vision and development of StudyBuddy, an AI-powered learning platform, from concept to market launch.
- Architected scalable backend with Node.js and Cloudflare Workers, enabling sub-100ms response times for >1,000 active users.
- Led full frontend redesign in React, improving usability and engagement metrics by 30%.
- Built an agentic AI framework compatible with multiple LLM providers, boosting flexibility and cost efficiency.
- Conducted user data analysis to refine AI routing models, increasing engagement and learning outcomes.
- Developed and optimized iPadOS, macOS, and iOS applications, extending the platform to Apple ecosystems and improving accessibility.

PROJECTS

- **StudyBuddy (Full-Stack Educational Platform)** – Architected and deployed a scalable AI-powered learning platform used by 1,000+ active users. Integrated advanced AI models through a custom

Node.js framework, optimized WebSocket and caching layers for sub-100ms response times, and delivered real-time collaboration features. (Tech: React, Node.js, Cloudflare Workers, WebSockets)

<https://studdybuddy.ca/>

- **Sentiment Analysis of Movie Reviews** — Developed an NLP pipeline for large-scale sentiment classification, improving accuracy by 15% over baseline. Implemented end-to-end preprocessing, training, and evaluation using LSTM models and TF-IDF embeddings. (Tech: Python, TensorFlow, Scikit-learn)
- **Moodle Email Scraper** — Engineered a high-performance web scraping tool to automate student email extraction, leveraging parallelization with ThreadPoolExecutor for a 50% speedup. Enhanced reliability with error handling and rate limiting, streamlining communication workflows. (Tech: Python, BeautifulSoup)

SKILLS

- **Programming Languages:** Python, JavaScript (ES6+), TypeScript, Java, C/C++, SQL
- **Web & App Development:** React, Node.js, Next.js, Express, iOS/macOS/iPadOS Development (Swift, SwiftUI)
- **AI/ML & Data:** TensorFlow, PyTorch, Scikit-learn, NLP (LSTM, TF-IDF, transformers), Data Preprocessing & Pipelines
- **Cloud & Infrastructure:** Cloudflare Workers, AWS (EC2, S3, Lambda), Docker, REST APIs, WebSockets
- **Systems & Databases:** Distributed Systems, PostgreSQL, MySQL, Redis, Operating Systems
- **Developer Tools:** Git/GitHub, VS Code, Xcode, Claude Code, Codex
- **Core Strengths:** Full-Stack Development, Scalable Architecture, Rapid Prototyping, Problem Solving, Research & Technical Writing