

KELECHI IBEKWE

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SOFTWARE ENGINEERING

Analytical, adaptive, and agile Software Engineer with **3+ years of experience** in managing end-to-end application development and optimization. Skilled in leading major codebase changes, implementing efficient solutions, and enhancing system performance. Proven ability to streamline processes, reduce bugs, and improve deployment cycles. Expertise in working with diverse technologies, including **Java/Spring, Python and Node.js**, to create scalable, secure, and high-performing applications. Ready to contribute technical expertise, problem-solving skills, and leadership to deliver innovative software solutions.

CORE COMPETENCIES

- Backend/Frontend
- Test Driven Development
- Testing & Debugging
- Agile Software Development
- Software Architecture & Deployment
- Application Lifecycle Management
- Data Management & Transformation
- Client Vendor Coordination
- System Design
- RAG pipeline Development
- API Design & Development
- Performance Optimization

Technical Acumen: Python | JavaScript/Typescript | Java | Spring | Next.js (React.js) | Node.js | Git | Express | PostgreSQL | Docker | Spring Boot | Redis | Flask | OpenAI API | HTML | CSS

PROFESSIONAL EXPERIENCE

Software Engineer | [TD Bank](#) | Calgary, AB

2022 – Present

Leads all aspects of 3 applications, managing diverse languages for smooth operation. Oversees necessary modifications, addresses errors, and implements new features while handling dynamic workloads. Takes charge of significant codebase changes for major projects, driving updates and improvements. Applies insights gained from personal projects, particularly in security, to enhance and support new initiatives.

Selected Accomplishments:

- ✓ Integrated fractional shares, positioning TD as first major Canadian bank to offer this feature. Updated 100+ Java projects, performing comprehensive testing to ensure standards were met and features were implemented.
- ✓ Spearheaded SEC-mandated code changes to reduce settlement time from T+2 to T+1. Developed a batch update system for faster code modifications and streamlined consolidation. Collaborated with senior engineers, completing the project a year ahead of schedule.
- ✓ Improved Python codebase, achieving a 40% faster deployment cycle. Took initiative to resolve issues in a disorganized codebase, which had been handled by multiple developers. Successfully cleaned up and streamlined the code while managing other projects, significantly reducing bugs and improving stability.
- ✓ Migrated 100+ Java applications from an end-of-life server to a new platform, optimizing system performance and ensuring seamless functionality. Developed a comprehensive migration process, addressing challenges and collaborating with vendors to implement solutions, resulting in a 97% customer satisfaction rate.
- ✓ Managed and maintained 3 applications: a Node.js app for running Java programs that generate financial reports, a Python-based ETL infrastructure that processes trade data for vendor analytics, and a recently integrated Java/Spring reporting application for robust and compliant audit processes.

Key Responsibilities:

- **Applications Management:** Manages end-to-end changes for three applications, customizing features for different clients. Responds quickly to tickets, investigates issues, and deploys updates to production. Takes full accountability for changes while managing a dynamic workload with varying features, issues, and modifications.

PROFESSIONAL EXPERIENCE (CONTINUED)

- **Progress Tracking:** Works closely with the manager to scope and track progress on major projects, providing regular updates. Plays a key role in defining and advising on project scope and feature implementation. Adapts to challenges, finding alternative solutions to obstacles that arise.
- **Client/Vendor Coordination:** Collaborates with vendors and clients on major projects, working with business analysts to address non-technical stakeholder needs and ensure effective programs and reports. Resolves issues and reviews code with senior engineers. Provides regular updates to the manager.
- **Organizational Skills:** Demonstrates excellent organizational skills in testing and documentation, especially during major codebase changes.
- **Code Optimization & Modular Development:** Improves codebases for greater efficiency, leveraging expertise to minimize issues. Receives praise for producing code with minimal oversight from senior engineers. Consolidates multiple feature branches, enhances code modularity, and implements test cases.

ADDITIONAL PROJECTS

Data Privacy Vault – [Link](#)

Engineered and implemented a comprehensive Node.js data privacy solution utilizing tokenization and AES encryption, enhancing data security 40%, improving the handling of sensitive data within the applications, successfully deploying in the workplace environment.

Daily Journal AI – [Link](#)

Designed and developed an innovative journaling assistant using Flask, GPT-4, NextJS and advanced embedding techniques to enable semantic search and generate context-aware prompts with short-term memory tracking, significantly enhancing user engagement.

- Engineered a RAG pipeline by integrating PostgreSQL with pgvector to efficiently store journal entries as embeddings, boosting long-term memory retrieval and powering personalized recommendation features.
- Spearheaded podcast feature development by repurposing journal entries into dynamic audio narratives. Leveraging NotebookLM via AutoContent API, this feature converts written insights into engaging, shareable podcast episodes—enhancing multimedia outreach and user accessibility.
- Implemented natural voice synthesis using Eleven Labs API, allowing users to interact with the application through high-quality, natural-sounding audio prompts.

ADDITIONAL NOTEWORTHY EXPERIENCE

Maintenance Engineering Intern | [Total](#) | Nigeria

Engineering Intern | [Stallion group](#) | Nigeria

Jan. 2017 – Sept. 2017

July 2015 – Sept 2015; July 2016 – Sept 2016

EDUCATION & CERTIFICATIONS

Masters in Mechanical Engineering University of Calgary	2022
Bachelor in Mechanical Engineering Afe Babalola University Nigeria	2018
<i>Additional Training & Certifications:</i>	
Obsidi Academy	Oct 2024
Data Analysis with Python IBM	June 2022
Databases and SQL for Data Science with Python IBM	April 2022
AI for Everyone DeepLearning.AI	2019
6.00.1x: Introduction to Computer Science & Programming using Python MITx Courses	2019