

# Cephas Osei-Bonsu

+1 (704) 239-3752 | [cephas.bonsuosei@gmail.com](mailto:cephas.bonsuosei@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## EDUCATION

### Livingstone College

B.S. Computer Science

Salisbury, NC

Expected Dec 2029

## EXPERIENCE

### Founder & Software Engineer, Vital-Go

2024–Present

*AI-Powered Real-Time Healthcare Monitoring Platform*

- Designed and building a real-time remote patient monitoring platform processing continuous vitals streams via FastAPI, PostgreSQL, and WebSockets, supporting live clinician dashboards and patient-facing health views.
- Architected 100+ REST/WebSocket endpoints and 25+ production database migrations (56+ schema operations), enabling scalable ingestion, device management, alerting, messaging, and analytics workflows.
- Built AI-driven risk scoring and automated alerting pipelines using 4 Celery background workers to compute rolling aggregates, detect threshold breaches, and surface high-risk patients in real time.
- Strengthened system reliability with 15+ dedicated test modules (1,500+ LOC), covering ingestion pipelines, authentication flows, aggregation logic, and AI insight validation.

### IT & Graphics Specialist, View Printing

2022 – 2024

*Marketing Design & Technical Support*

- Designed and delivered 45+ high-impact marketing assets monthly (Photoshop/Illustrator/CorelDRAW) for diverse client campaigns, improving turnaround ~20%, repeat sales ~15%, and brand consistency.
- Resolved 10–15+ weekly system issues, reducing downtime ~25% through structured diagnostics and maintenance.
- Improved client intake and job tracking workflows, cutting admin delays ~30% using Office/Google Workspace.

## PROJECTS

### Interview Prep AI — Full-Stack Mock Interview Platform | *FastAPI, Postgres, LLM, RAG*

- Built an end-to-end mock interview platform (JWT auth + session state machine) for technical/behavioral prep targeting Amazon/Apple/Microsoft-style interviews; 300+ free users.
- Optimized interview flow and engagement through iterative testing, achieving 78.6% session completion with 4.64 questions/session and concise depth for high-quality practice.
- Implemented feedback-driven RAG (embeddings + similarity retrieval) to generate follow-ups from curated question banks across software engineering and cybersecurity roles.

### PedraX — AI Document Intelligence Suite | *FastAPI, OCR, DeepSeek API, Render*

- Deployed a document intelligence engine on Render processing 100+ documents/day using async workers + queued processing for scalable request handling.
- Built PDF/DOCX/XLSX ingestion with OCR fallback; achieved ~95% extraction accuracy on structured fields.
- Reduced extraction time by 45% (8–12s/document) for 50–200 page files using optimized pipelines.
- Automated summaries, quizzes, and DOCX/PDF reports, reducing manual review time by 70%+.

### AI Resume Job Match Evaluator | *FastAPI, NLP, Embeddings, Dashboards*

- Built a FastAPI matching engine for jobs/scholarships/programs; processes 50+ resumes/day using normalized scoring rubrics for consistent evaluations
- Implemented TF-IDF + embedding similarity for semantic matching; reached ~85% agreement with manual review outcomes.
- Delivered dashboards for strengths/gaps/match%; reduced evaluation time by ~50% with clear, actionable results.

### VERXA AI Website Builder | *Node.js, DeepSeek API, Netlify, HTML/CSS/JS*

- Built prompt-to-website generator producing complete HTML/CSS/JS templates; supports 15+ builds/day across portfolio/business/e-commerce flows.
- Implemented live preview (<1.5s) and multi-template generation achieving ~90% usability across core UI.
- Integrated one-click Netlify deployment, cutting publish time from 10–15 minutes to ~60 seconds.

## TECHNICAL SKILLS

Languages: Python, JavaScript, SQL (PostgreSQL), HTML/CSS

Frameworks: FastAPI, React/Next.js, Node.js/Express

Tools & AI: Git/GitHub, Docker, Redis, Render, Netlify, VS Code, LLM APIs, RAG, NLP Scoring