Tafadzwa Chigumira

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Professional Summary

Computer Science student specializing in AI and software engineering with proven experience in building intelligent applications and scalable systems. Demonstrated success in designing RESTful APIs, streamlining data pipelines, and deploying ML models. Skilled in Python, JavaScript, and cloud technologies with a focus on creating innovative solutions that merge robust engineering principles with advanced AI capabilities.

Education

Akademia Finansów i Biznesu Vistula Warsaw, Poland

B.E. in Computer Science and Engineering, Specialization in AI & Machine Learning *Oct. 2022 – May. 2026*

- *AI & ML Coursework:* Machine Learning Algorithms, Deep Learning, Neural Networks, Natural Language Processing, Computer Vision, Big Data Analytics, Statistical Methods for AI, Reinforcement Learning
- *Software Engineering Coursework:* Data Structures & Algorithms, Object-Oriented Programming, Database Systems, Web Development, System Design, Operating Systems, Software Testing & QA, Distributed Systems, Cloud Computing, Agile Methodologies

Experience

Software Engineer Intern Feb. 2025 – Present

GLP Software House *Warsaw, Poland*

- **Architected** a high-performance REST API using FastAPI and PostgreSQL that integrated ML-based recommendation algorithms, enhancing content relevance by 35%
- **Established** CI/CD pipelines using GitHub Actions that accelerated deployment time by 70% and streamlined testing across multiple environments
- **Designed** microservices architecture adhering to clean code principles, yielding 40% improvement in system maintainability and scalability
- **Refined** database queries and introduced efficient caching strategies that lowered average API response time from 300ms to 85ms

Technical Support Specialist Oct. 2023 – Aug. 2024

Foundever *Warsaw, Poland*

- **Coordinated** campus-wide computer setup tailored for development and ML workloads, shortening environment setup time by 65%
- **Created** automated Python scripts for system diagnostics that proactively identified issues, minimizing downtime by 30%
- **Integrated** Docker containerization for consistent development environments, eliminating 90% of configuration discrepancies
- **Partnered** with software development teams to enhance testing infrastructure, resulting in 45% faster test execution times

Projects

AI Research Assistant | *Python, PyTorch, FastAPI, React, PostgreSQL, Docker* Feb. 2024 – Present

- **Constructed** a microservices-based intelligent research platform with 99.9% uptime using containerized deployments and Kubernetes
- **Crafted** RESTful APIs following OpenAPI specifications with comprehensive test coverage achieving 94% code coverage
- **Engineered** custom NLP pipelines for text processing with advanced algorithms that expedited inference time by 40%
- **Formulated** a scalable database schema with strategic indexing that enables efficient querying across 10M+ documents

Self-Balancing Robot | *Python, TensorFlow, ROS, C++, Embedded Systems* Mar. 2024 – Present

- **Built** a real-time control system using multithreaded C++ that maintained precise timing constraints with ¡2ms jitter
- **Devised** robust error handling and failsafe mechanisms ensuring system stability during component failures

- **Programmed** efficient sensor data processing algorithms that decreased CPU utilization by 35% compared to standard implementations
- **Structured** a modular codebase with 95% test coverage, facilitating rapid feature development and system evolution

Smart Document Collaboration Platform | *Django, Next.js, Redis, WebSockets, AWS* Mar. 2024 – Present

- **Composed** a scalable architecture using Django REST framework backend and Next.js frontend with server-side rendering
- **Pioneered** real-time collaboration using WebSockets with conflict resolution algorithms achieving 99.7% sync accuracy
- **Enhanced** front-end performance using React hooks and memoization techniques, cutting page load time by 65%
- **Orchestrated** application deployment on AWS using infrastructure-as-code (Terraform) with automated scaling and monitoring

Certifications

Python for Data Science and Machine Learning Oct. 2024
Udemy *Credential ID: UC-503cda5b-37eb-4954-9596-3f6d48f914de*

Technical Skills

Programming Languages: Python, JavaScript/TypeScript, Java, C/C++, Go, SQL
Software Engineering: API Design, Microservices, System Architecture, Design Patterns, Code Quality, Test-Driven Development
Web Development: React, Next.js, FastAPI, Django, Flask, Node.js, Express, HTML/CSS, REST, GraphQL
DevOps & Cloud: Docker, Kubernetes, AWS, GCP, CI/CD, GitHub Actions, Jenkins, Terraform
Machine Learning: TensorFlow, PyTorch, Scikit-learn, XGBoost, Hugging Face Transformers
Data Engineering: Pandas, NumPy, Spark, Airflow, Kafka, ETL Pipelines
Databases: PostgreSQL, MongoDB, Redis, Elasticsearch, DynamoDB
Testing: Unit Testing, Integration Testing, E2E Testing, Jest, Pytest, Selenium

Languages

English: Fluent