SIMON MUCHEMI

Software Engineer

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GitHub | LinkedIn

TECHNICAL SKILLS

Programming Languages:	Python, JavaScript, TypeScript, GoLang, Java, C
Frontend Technologies:	React.js, HTML5, CSS3, Responsive Design
Back-end Technologies:	Node.js, Express.js, Frappe, Flask, SQLAlchemy, Prisma, Mongoose
Databases:	MongoDB, MySQL, SQLite, PostgreSQL
Developer Tools:	Git, GitHub, VS Code, Postman, Jest, Unittest
Cloud & Platforms:	AWS (EC2, S3, Secrets Manager), Linux, Docker, CI/CD, GitHub Actions
Caching & Messaging:	Redis, RabbitMQ
AI/ML Technologies:	TensorFlow, Large Language Models (LLMs)
Testing & QA:	Unit Testing, Integration Testing, Jest, Unittest, Automated Testing
Security:	JWT Authentication, SSL/TLS Encryption, Security Best Practices

EXPERIENCE

Software Engineer | Navari Limited   Nairobi, Kenya
Jan 2025 - Present

- Collaborated with 5+ engineers to maintain and enhance ERP systems using Frappe and ERPNext, achieving 99.9% system uptime
- Resolved 50+ critical bugs through systematic debugging and ticketing system management, reducing system downtime by 30%
- Implemented performance optimizations and new features that improved user experience for 500+ active users

Software Engineer | Teach2Give   Nyeri, Kenya
Sep 2024 - Dec 2024

- Developed and maintained scalable web applications using React and Express with TypeScript, serving 100+ concurrent users
- Enhanced application reliability by implementing comprehensive unit and integration tests with Jest, achieving 90% code coverage
- Optimized database operations using Sequelize ORM and SQL, improving query performance by 40%
- Built efficient API integration systems that reduced data loading times by 25% across multiple platforms

Computer Science Intern | Dedan Kimathi University of Technology   Nyeri, Kenya
Feb 2023 - Mar 2023

- Designed and simulated complex network topologies using Cisco PacketTracer, demonstrating networking fundamentals
- Conducted hardware troubleshooting and system maintenance for 20+ computer systems
- Applied software development lifecycle principles to document and develop 3 software projects from conception to deployment

PROJECTS

ShopSmart E-commerce API | GitHub   TypeScript, Node.js, MongoDB, AWS

- Built robust RESTful API handling 1000+ concurrent requests with comprehensive product management and user authentication
- Integrated secure payment processing with MPesa, processing 500+ transactions with 99.9% success rate
- Implemented scalable architecture supporting e-commerce applications with detailed API documentation

DevCamper Bootcamp API | GitHub   Node.js, Express.js, MongoDB, AWS

- Developed comprehensive RESTful API with JWT authentication, supporting 100+ bootcamps and 500+ courses
- Implemented advanced security measures including rate limiting, CORS, and XSS protection, achieving zero security incidents
- Optimized performance with pagination and filtering, reducing average response time by 60%

TheraBot AI Therapy Assistant | GitHub   Python, OpenAI GPT-3.5, Flask

- Fine-tuned GPT-3.5-turbo model to provide empathetic counseling responses, achieving 85% user satisfaction rating
- Developed secure AI-powered therapy platform serving 200+ users with privacy-focused design
- Implemented natural language processing for mental health support with 24/7 availability

BookNest Library Management System | GitHub   Python, Flask, React.js, SQLite

- Built full-stack library management system with Flask API and React frontend, managing 1000+ books and 100+ members
- Implemented automated fee tracking and transaction management, reducing manual processing time by 80%
- Designed intuitive user interface enabling librarians to efficiently manage daily operations

FileSearchTCP Multi-threaded Server | GitHub   Python, TCP Sockets, SSL, Threading

- Engineered high-performance file search application using TCP sockets, handling 50+ concurrent client connections
- Implemented advanced search algorithms reducing average search time by 70% across large file systems
- Secured communication with SSL encryption and optimized multi-threading for enhanced responsiveness

CERTIFICATIONS & TRAINING

Software Engineering - Back-end Specialization | African Leadership Experience (ALX) Jan 2024 - Feb 2025
Certificate Link

Quality Assurance/Engineering Certification | Teach2Give   Sep 2024 - Dec 2024
Certificate Link