Zulfiqer Sekender

Senior Full Stack Engineer | Python, Golang, JavaScript/TypeScript, AI

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EXPERIENCE

Innovate Dynamic – Senior Full Stack Python/Golang/React Founding Engineer

Jul 2021 - Present

Designed, developed, and maintained a scalable web-based healthcare system for temporary treatment of minor ailments for uninsured patients.

- Led technical design, development, testing, and maintenance while providing hands-on development and technical guidance to a 5-member team
- Developed vertical-focused AI chatbot for customer support using LLMs and RAG techniques
- Integrated healthcare system with MDToolbox (e-prescribing software) and Google APIs for pharmacy location services, reducing manual interventions by 90%
- Performed data analysis and modeling in Python using statistical methods and machine learning algorithms
- Mentored 5 engineers, conducted code reviews, and implemented development best practices resulting in 20% reduction in production bugs and 98% on-time delivery
- Implemented automated testing and verification processes, reducing operating costs by 20% annually ($100,000 savings)
- Ensured HIPAA compliance across all developed products
- Debugged and resolved software defects across testing stages and production environments
- Technologies used: Python, Golang, React, PostgreSQL, gRPC, AWS, Kubernetes, Kafka, OpenAI API, TensorFlow, PyTorch, HuggingFace, Scikit-learn, LlamaIndex, Ollama, llama3, mistral

Nokia – Senior Full Stack Python/Golang/React Engineer

Jul 2020 – Jul 2021

- Designed and developed optical fiber modem simulation for Nokia's automated CI/CD system, reducing testing time by 40%
- Built custom Python simulation framework supporting 50+ concurrent modem configurations for testing scalability
- Deployed and secured Large Language Models for infrastructure management with enhanced data privacy
- Implemented automated regression testing suite covering 95% of modem functionality scenarios
- Performed data analysis and modeling in Python using statistical methods and machine learning algorithms, improving decision-making efficiency by 20%
- Created predictive models for network performance optimization using TensorFlow and historical data analysis
- Participated in design reviews, code reviews, and technical issue resolution
- Generated automated reports for system statistics and performance metrics
- Optimized fiber optic signal processing algorithms, improving simulation accuracy by 30%
- Collaborated with hardware engineering teams to validate simulation results against physical modem behavior
- Technologies used: Python, C/C++, Pandas, NumPy, TensorFlow, Linux, Grafana, Elasticsearch

TIDAMED (The Interim Doctor App) – Senior Full Stack Python/Golang/React Founding Engineer

Nov 2019 – Jul 2020

Designed, developed, and maintained TIDAMED system—a smart device app for primary care physicians and patients for temporary treatment of minor ailments for uninsured patients. Increased patient engagement by 35% within first six months.

- Led end-to-end design, development, testing, and maintenance of the TIDAMED system
- Implemented secure video consultation feature with end-to-end encryption for patient-doctor interactions
- Supervised 4-member team ensuring HIPAA compliance while contributing hands-on coding
- Created patient symptom assessment algorithms using decision trees and medical knowledge bases
- Integrated with multiple payment gateways to support uninsured patient payment processing
- Developed prescription management system with electronic signature capabilities for healthcare providers
- Implemented automated test execution and result verification processes
- Created patient notification system using push notifications/SMS for appointment reminders and follow-ups
- Debugged and resolved software defects across testing and production environments
- Technologies used: Python, Golang, React, PostgreSQL, gRPC, AWS, Microservices, REST APIs, HIPAA compliance

Verizon Wireless – Senior Software Engineer / Python, Golang, Java, React

Jul 2013 – Nov 2019

Senior Software Engineer for Verizon Remote Mobile Device Diagnostic systems, developing applications for remote debugging and fixing mobile device issues.

- Reduced operating costs by 40% annually, achieving approximately $200,000 in yearly savings
- Enhanced Remote Mobile Device Diagnostic Server using OMADM Protocol for 4G and 5G devices, optimizing server performance by 40% and reducing system downtime by 25%
- Built real-time diagnostic dashboard serving 100,000+ active mobile devices with sub-second response times
- Led research and implementation of remote mobile device screen transfer and touch injection capabilities
- Created automated device health monitoring system with predictive failure analysis using machine learning models
- Developed and supported LWM2M/IoT server for device management over sensor and cellular networks
- Migrated applications to AWS utilizing various AWS services, cutting infrastructure costs by 15% and improving system uptime by 20%
- Conducted performance analysis and load testing for system improvements
- Automated report generation for system health and performance metrics
- Performed data analysis and modeling in Python using statistical methods and machine learning algorithms
- Technologies used: Python, Golang, Spring Boot, React, AWS, Kubernetes, IBM MQ, Jenkins, Splunk, Redis, Kafka, Oracle

CLS Bank – Senior Software Engineer | C/C++, Erlang, Network

Nov 2012 – Jul 2013

- Designed, implemented, and tested CLS Bank's FX transaction system ensuring low latency and high scalability, reducing latency by 30%
- Built high-frequency trading system processing 100,000+ transactions per second with microsecond-level latency requirements
- Developed real-time risk management algorithms for foreign exchange transaction validation and monitoring
- Created distributed transaction processing system using Erlang/OTP for fault tolerance and concurrent processing

- Implemented comprehensive logging and audit trail system for regulatory compliance and transaction tracking
- Coordinated and managed offshore development team ensuring quality deliverables and on-time delivery
- Optimized network protocols and serialization formats to achieve sub-millisecond message processing times
- Integrated with multiple financial data providers for real-time currency rate feeds and market data
- Technologies used: C/C++11, Erlang/OTP, Windows, HTTPS, JSON, TCP/IP, low latency systems

Verizon Wireless – Software Engineer | C/C++, Erlang, Java

Nov 2010 – Nov 2012

- Developed Verizon Push project providing secure and reliable message delivery to mobile devices
- Integrated Verizon push platform with APNS and C2DM, increasing reliability by 50%
- Implemented message prioritization and routing algorithms for optimal delivery based on device type and network conditions
- Developed comprehensive analytics dashboard for push notification performance monitoring and optimization
- Created automated failover system ensuring message delivery continuity during server maintenance and outages
- Developed MAS (Mobile Accessory Store) enabling mobile device and web-based accessory purchases
- Implemented inventory management system with real-time stock tracking and automated reorder functionality
- Created responsive web interface and mobile app supporting cross-platform accessory browsing and purchasing
- Technologies used: C/C++11, Erlang/OTP, AWS, Java, Kubernetes, IBM MQ

SKILLS

Languages & Frameworks: Python, Golang (Go), C/C++, Java, JavaScript/TypeScript (React, Angular, Node.js), Spring Boot

AI/ML Technologies: OpenAI API, TensorFlow, PyTorch, HuggingFace, Scikit-learn, LlamaIndex, Ollama, llama3, mistral, RAG, Vector Databases

Cloud & Infrastructure: AWS, GCP, Azure, Docker, Kubernetes, Linux, UNIX, Windows, Android

Databases & Storage: PostgreSQL, Oracle, MySQL, MongoDB, Redis, Vector Databases, Elasticsearch

Development Practices: Microservices, REST APIs, gRPC, GraphQL, CI/CD, Git, Jenkins, Agile, Object Oriented Design

Messaging & Monitoring: RabbitMQ, Kafka, Splunk, Grafana, Kibana, IBM MQ

EDUCATION

North Dakota State University (NDSU) - Fargo, North Dakota – *MSc. In Computer Science*

Bangladesh University of Engineering and Technology (BUET) - Dhaka, Bangladesh – *BSc. In Computer Science*

US PATENTS

US Patent 9,197,575: "Handling of Snapshot Messages as a Result of Delivery Failure In a Two-Way Push Connection"
US Patent 9,819,785: "Multimedia Messaging Service Communication using a Two Way Push Connection"
US Patent 9,832,314: "Customer Representative Remote Access for Troubleshooting Smart Phones"

Additional Information

US Citizen - No visa sponsorship required