VANESSA FORD

Senior Backend Software Engineer | Python | C++

@ help@enhancv.com · linkedin.com · San Antonio, Texas

SUMMARY

Experienced Senior Backend Software Engineer with a strong background in Python and C++. Passionate about developing high-performance and reliable systems within the medical industry. Successfully led cross-functional teams in delivering advanced software projects and ensuring continuous availability of critical services. Proficient in utilizing AWS services, SQL and NoSQL databases, and CI/CD tools. Master's degree in Computer Science and a track record of optimizing backend systems resulting in improved efficiency and preventing patient deaths. Excited to contribute to a London-based client's life-saving device through proprietary hardware, software, and algorithms. Committed to driving innovation and making a positive impact on patient care.

EXPERIENCE

Lead Backend Software Engineer
2018 - 2022

MedTech Solutions
San Antonio, Texas

Developed and maintained high-performance APIs, fetching billions of data points related to patient information resulting in accurate medical analyses.

- Optimized backend systems written in Python and C++, improving overall efficiency by 30% resulting in faster data retrieval.
- Implemented CI/CD pipelines using Github Actions and Jenkins, reducing deployment time by 40%.
- Collaborated with U.S. and U.K. based teams to create functional table structures for a 5-terabyte healthcare database.
- Ensured continuous availability of services to customers by implementing fault-tolerant architecture on AWS.
- Contributed to the integration of electronic healthcare management software, enabling real-time patient data updates.

Senior Software Engineer
2016 - 2018

HealthTech Innovations
Austin, Texas

Developed advanced software projects and worked on medical device detection algorithms resulting in improved patient safety.

- Designed and implemented scalable APIs using Python, serving as the backbone for retrieving extensive patient data.
- Collaborated with cross-functional teams to develop proprietary hardware and software solutions for medical devices.
- Utilized SQL and NoSQL databases (Postgres, TimescaleDB, MongoDB) to store and analyze large datasets.
- Implemented test-driven development (TDD) approach, reducing code defects by 25%.
- Contributed to the adoption of Infrastructure as Code (IAC) tools like Terraform for provisioning AWS resources.

STRENGTHS

☆ **Problem Solver**
Successfully resolved complex software issues resulting in improved system performance and reliability.

✔ **Collaborative Team Player**
Contributed to cross-functional teams, fostering effective communication and achieving project milestones.

⬈ **Adaptable Leader**
Led a team of developers through agile software development cycles, delivering high-quality products on time.

SKILLS

Python · C++ ·

Amazon AWS Services · SQL ·

MySQL · PostgreSQL ·

NoSQL databases ·

Atlassian JIRA · Confluence ·

Terraform · Git · CI/CD ·

Test-driven Development (TDD)

PROJECTS

HealthTrack API

Developed a RESTful API for tracking and analyzing patient health data. GitHub: github.com/healthtrack-api

MediCare App

Built a mobile application for managing medical appointments and prescriptions. GitHub: github.com/medicare-app

EXPERIENCE

Software Engineer

Healthcare Systems Inc.

2014 - 2016

Houston, Texas

Developed and maintained software systems supporting critical healthcare operations.

- Enhanced existing backend systems written in Python, increasing system performance by 20%.
- Collaborated with a team of engineers to design and develop software products deployed in healthcare environments.
- Utilized Amazon AWS services for scalable infrastructure and storage solutions.
- Implemented automated testing frameworks, reducing the number of software defects by 30%.
- Provided technical support and training to end-users, ensuring smooth system implementation.

EDUCATION

Master of Science in Computer Science

University of Texas

2012 - 2014

Austin, Texas

Bachelor of Engineering in Software Engineering

Texas A&M University

2008 - 2012

College Station, Texas

CERTIFICATION

Advanced Data Structures and Algorithms

Online course from Coursera

Cloud Computing Architectural Patterns

Certification by AWS Training & Certification

PASSIONS

Biomedical Technology

Passionate about exploring cutting-edge advancements in biomedical technology and their potential to improve healthcare outcomes.