Wenyi Qian

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WORK EXPERIENCE

Microsoft Shanghai
SOFTWARE ENGINEER INTERN, LINUX SYSTEM GROUP May 2021 - August 2021

- Optimized Linux Integration Services Automation (LISA) by employing Python-based text-processing libraries. Collaborated across teams to ensure seamless feature integration and system performance improvements
- Designed and implemented a documentation system using Sphinx, categorizing readers via role-based analysis and guide templates. Reduced onboarding time by 3x (10s → 3s) and increased user satisfaction by 60% through post-launch surveys
- Integrated Sphinx and Read the Docs to automate documentation site updates, decreasing manual maintenance time by 50% and achieving 95% documentation consistency across five release cycles
- Built CI/CD pipelines using Abstract Syntax Trees (AST) to automatically fetch and update documentation changes. Eliminated manual errors by 100% and streamlined documentation process

JiangSu ZhongMingHuiYe Technology LTD Wuxi
SOFTWARE ENGINEER, SOFTWARE DEVELOPMENT DEPARTMENT September 2022 - March 2023

- Spearheaded development of "Smart Community Management Platform" using IoT sensors integrated via MQTT protocol. Cut down incident response times by 80% and increased public safety scores by 50%
- Architected and initiated a foundational data system with 4 key identifiers (people, places, events, objects) using Redis for real-time processing. Boosted real-time data accuracy by 60% and enabled seamless scalability for future extensions

Lakecloud Wuxi
SOFTWARE ENGINEER INTERN, SOFTWARE DEVELOPMENT DEPARTMENT May 2020 - August 2020

- Constructed a web application for managing human and building resources using Springboot. Augmented resource management efficiency by 95%
- Developed and deployed a CI/CD pipeline using Jenkins and Selenium for automated web interface testing. Diminished manual testing efforts by over 8 hours per week and improving testing accuracy
- Discovered and resolved an SQL injection vulnerability in employee ID system, safeguarding sensitive personal information

SKILLS

Coding languages: Python, C, Java, JavaScript, TypeScript
Web Development: Flask, FastAPI, Springboot, Beautiful Soup, Selenium, SQLite, Next.js, React
AI Frameworks: NumPy, PyTorch, TensorFlow, Keras, nltk, Scikit-learn, wandb, OpenAI API
Cloud/DevOps: Cloud Services (AWS & GCP), Git, Linux, Docker, CI/CD Pipelines, Anaconda
Security Testing: SonarQube, BurpSuite, Security Onion; threat models (NIST, STRIDE, PASTA, etc.), risk assessment

PROJECT EXPERIENCE

NIST GenAI Carnegie Mellon University
BACKEND DEVELOPER August 2024 - December 2024

- Devised and applied backend microservices for an AI chatbot in Python using boto3 and REST API
- Optimized backend components for scalability and high availability by leveraging AWS services, including S3 buckets for data storage, Lambda functions for serverless compute, Bedrock for building a knowledge base, and Amplify for CI/CD

Labtool UI Bucknell University
LEAD DEVELOPER August 2021 - December 2021

- Designed and developed a cross-platform JSON editor app tailored for lab configurations using Electron for the GUI and Python for backend logic. Introduced auto-formatting and validation. Cut configuration time by 80%
- Led a 4-person development team. Adopted Kanban methodology with Trello to enhance task prioritization and visibility. Refined project development efficiency by 60%

EDUCATION

Carnegie Mellon University Pittsburgh, PA
Master of Science in Information Technology – Information Security December 2024

- Coursework: Information Security, Browser Security, AI applications in InfoSec, Cyber Risk Modeling, Applied Information Assurance, Deep Learning, Natural Language Processing, Prompt Engineering, Advanced Real-World Data Networks

Bucknell University Lewisburg, PA
Bachelor of Arts in Computer Science & Linguistics May 2022

- Coursework: Data Structures, Software Engineering & Design, Algorithms, Operating Systems, Image Processing