SANDEEP REDDY YERUVA





EXPERIENCE

Cognizant, India | Software Engineer | May 2020 – June 2022

- Worked on developing and maintaining RESTful APIs using Python Django, Node.js, and .NET, helping improve client system interoperability and reducing API latency to under 200ms.
- Built and maintained React.js components, enhancing user experience and improving performance by around 78%.
- Developed and optimized .NET microservices, improving scalability and reducing server load by roughly 75%.
- Automated data workflows using NumPy, cutting down manual effort by about 5 hours per month and improving accuracy by around 80%.
- Helped integrate Stripe payment gateways into a microservices-based e-commerce platform, leading to a 70% improvement in transaction success rates.
- Assisted in implementing Jenkins CI/CD pipelines for two projects, which reduced deployment downtime by 85%.
- Co-designed Prometheus and Grafana monitoring, reducing production server errors by 75% with real-time alerts.
- Optimized SQL queries and helped migrate a legacy database to PostgreSQL, reducing query response times by about 80% for a banking client's reporting system.

UL Solutions, US | Software Engineer Intern | May 2024 – Aug 2024 and June 2023 – July 2023

- Developed and optimized unit tests for Python applications, reducing defects by 20% and improving system reliability.
- Spearheaded code reviews and pair programming sessions, identifying critical improvements that enhanced code quality and reduced deployment failures.
- Designed and managed AWS infrastructure, optimizing EC2 and S3 usage, and implemented CI/CD pipelines using AWS CodePipeline, cutting deployment time by 40%.
- Revamped project documentation in Confluence and GitHub Wikis, creating installation guides and onboarding materials that helped new developers ramp up 30% faster.
- Led Agile/Scrum rituals, including sprint planning, stand-ups, and retrospectives, ensuring timely project delivery.
- Resolved production issues, cutting debugging time by 50% with enhanced logging and automation.

TECHNICAL SKILLS

- Programming & Scripting: Python, Java, JavaScript, Node.js, .NET, HTML5, CSS3
- Frameworks & Libraries: React.js, Django, NumPy, Pyfhel (BFV Homomorphic Encryption)
- **Databases:** PostgreSQL, SQLite
- Cloud & DevOps: AWS (EC2, S3, CodePipeline), Jenkins (CI/CD), Prometheus, Grafana
- Version Control & Collaboration: Git, GitHub, Confluence, Figma
- Payments & Integrations: Stripe (microservices-based e-commerce integration)
- **Methodologies:** Agile/Scrum (sprint planning, daily stand-ups, retrospectives)

PROJECTS

Secure Electronic Voting System using BFV Homomorphic Encryption | Master's Project

- Developed a secure online voting platform with Django, integrating authentication, encrypted vote storage, and automated tallying for 1,000+ users. Leveraged Python, HTML5, CSS3, and JavaScript, boosting engagement by 25%.
- Implemented BFV Homomorphic Encryption (Pyfhel) for confidential vote tallying while ensuring privacy and integrity.
- Designed responsive, accessible dashboards with Django templates and CSS, enhancing real-time result visualization and reducing admin overhead by 30%.
- Utilized SQLite for secure data storage and efficient encryption key management, ensuring scalability.
- Used Figma to create intuitive UI/UX prototypes, improving usability and development workflow.

EDUCATOIN

- Master's in computer science | California State University, Sacramento, CA
- Bachelor's in computer science | Acharya Nagarjuna University, India

CERTIFICATIONS

- AWS: Solutions Architecture Associate
- LinkedIn Learning: Big Data in the Age of AI, HTML, CSS, Python Object Oriented Programming.