CHAITANYA MALEPATI

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EDUCATION

Masters in Computer Software Engineering   **Expected May 2026**
Northeastern University, Boston, MA
Coursework - Object Oriented Design, Web design, Program structures and algorithms, Cloud Computing

Bachelor of Technology in Computer Science and Engineering   **Dec 2020 - May 2024**
Sri Venkateswara Engineering College, Tirupati, India

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, Go, Java, C, C++
Database Technologies: PostgreSQL, MongoDB, MySQL, Redis, SQL Server
Web Technologies: React.js, Express.js, Spring Boot, HTML, Figma, Tailwind CSS
Cloud Tools: AWS, Docker, CI/CD, Terraform, Ansible, Shell Scripting, Kubernetes
Tools: Git, GitHub, IDEs, Linux, Vim, Microsoft Office

EXPERIENCE

Software Engineer Intern   **Oct 2023 - Mar 2024**
Young minds Technology Solutions, Tirupati, India
- Contributed to software development life cycle by collaborating with the team to resolve bugs in node and java
- Assisted in Designing scalable distributed systems using a microservices architecture and AWS services
- Involved in Integrating Terraform to spin up the services with Ansible, automated the deployment of infrastructure reducing manual setup by 60%
- Proactively learned emerging technologies to contribute to team goals and enhance technical versatility
- Debugged and fixed a complex authentication issue that had impacted user experience for weeks

PROJECTS

CLOUD NATIVE APPLICATION
- Implemented Infrastructure as Code using Terraform to automate provisioning of AWS resources (VPC, EC2, RDS, S3, Lambda, IAM, SNS, CloudWatch)
- Configured DNS routing with Route 53, SSL/TLS termination via ACM, and domain management for end-to-end HTTPS
- Orchestrated dynamic scaling using Auto Scaling Groups (ASG) and Elastic Load Balancer (ELB), ensuring high availability during traffic spikes
- Secured sensitive data using AWS KMS, encrypted EBS volumes/S3 buckets, and managed secrets via AWS Secrets
- Implemented comprehensive unit and integration tests achieving 90%+ code coverage for critical API endpoints

SESSION MANAGEMENT
- Built a secure token-based authentication system using Go and Redis, storing temporary session tokens with automatic expiry to protect inactive users
- Created detailed documentation for API endpoints that became the standard template for the reference
- Containerized the application with Docker and deployed it on AWS EKS (Kubernetes), leveraging RDS for PostgreSQL and ElastiCache for Redis to increase scalability

SPEECH GUARDIAN
- Built VoiceBridge, an AI model that helps people with speech differences communicate with voice assistants, using PyTorch and real-world voice data
- Volunteered weekly at a community center to help individuals with speech differences test and provide feedback
- Using PyTorch, I took an existing speech-recognition tool and tweaked it with the new data
- Developed custom data augmentation techniques to improve recognition of underrepresented speech patterns

Hotel Booking System
- Optimized RESTful APIs to ensure seamless communication between frontend using React and backend using Node.js
- Integrated a ChatGPT-API chatbot to enhance customer experience by providing instant responses to inquiries
- Utilized Sequelize ORM for efficient database operations and migrations, ensuring seamless schema updates

CERTIFICATIONS

- AWS CERTIFIED CLOUD PRACTITIONER