

# SWETHA PATURU

☎ (857)313-2977 ✉ [paturu.s@northeastern.edu](mailto:paturu.s@northeastern.edu) [www.linkedin.com/in/swetha-paturu](https://www.linkedin.com/in/swetha-paturu) [github.com/swethapaturu9](https://github.com/swethapaturu9)

## Education

**Northeastern University, Boston MA**

**Expected May 2024**

*Master of Science in Computer Software Engineering*

Relevant Coursework: Object Oriented Design, Data Structures & Algorithms, Networks & Cloud Computing

**National Institute of Technology Warangal, India**

**May 2021**

*Bachelor of Technology in Electronics & Communication Engineering*

## Technical Skills

### Certifications

Certified Kubernetes Application Developer (CKAD)

### Languages & Frameworks

Java, Python, JavaScript, Spring MVC, Spring Boot, React.js

### DevOps Tools

Jenkins, GitHub Actions, Docker, Kubernetes, Helm, Terraform, Pulumi, Packer

### Databases

MySQL, MongoDB, Amazon DynamoDB

## Work Experience

**Larsen & Toubro Infotech Ltd.**

**July 2021 - July 2022**

*Software Engineer - Cloud Native*

*Hyderabad, India*

### ***Skill Testing Platform Development***

- Developed a grading microservice as part of transforming a large-scale employee skill testing system into Spring Boot microservices, using RabbitMQ to serve 15,000 users
- Added unit and integration tests using JUnit and Spring Test achieving a total test coverage of 90%
- Coordinated with multiple teams, in a Scrum-based setting, leveraging Jira for project tracking

### ***IBM Multicloud Management - Proof of Concept***

- Collaborated on POC deploying Spring Boot microservices across multiple cloud platforms using IBM Multicloud Management for centralized control. Built & integrated a CI pipeline in Jenkins
- Orchestrated Kubernetes deployments across OpenShift and Google Kubernetes Engine using Helm
- Led demonstration of Multi-Cloud Management capabilities for Sales and Stakeholders

**Ktree Software Solutions**

**May 2020 - Aug. 2020**

*DevOps Intern*

*Hyderabad, India*

- Created an application performance monitoring dashboard in Grafana, using critical CloudWatch metrics which led to a 30% improvement in application response time
- Deployed Grafana dashboard using AWS CloudFormation template (YAML) for enhanced scalability

## Projects

**Cloud Native WebApp** | *Spring Boot, GitHub Actions, Packer*

**GitHub Link**

- Developed a Spring Boot application with RESTful controllers for user and assignment management
- Integrated with a securely configured AWS RDS MySQL database
- Incorporated secure authentication using Spring Security with Bcrypt for password hashing
- Streamlined deployment using Packer-built AMIs with shell scripting, automated by GitHub Actions

**DevOps & AWS Infrastructure** | *Pulumi, Python, AWS*

**GitHub Link**

- Orchestrated infrastructure with Pulumi and Python (VPC, subnets, security groups, IAM roles, EC2)
- Enhanced monitoring with CloudWatch agent integration
- Scaled deployment on EC2 with Auto Scaling based on CloudWatch alarms
- Secured and efficiently routed requests through an Application Load Balancer with SSL termination
- Configured a custom domain in Route 53 for user-friendly access

**Cloud Resume Challenge** | *React.js, Terraform, AWS S3, DynamoDB, Python*

**GitHub Link**

- Built a React.js portfolio website, securely hosting it on AWS S3 with CloudFront
- Implemented a dynamic view counter (AWS Lambda, DynamoDB), provisioning infrastructure with Terraform
- Automated infrastructure (Terraform with S3 backend) and application CI/CD using GitHub Actions

## Activities

- Residential Security Officer - Northeastern University (Part-time)