Umesh Chandra Karagatla
(AWS Certified Cloud Practitioner)
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Education

University of Texas at Arlington, Arlington, Texas, USA   Aug 2022 – May 2024
Master's in Computer Science   **GPA:3.8/4**
   Coursework: Web Data Management, Software Engineering, Cloud Computing, Design and Analysis of Algorithms, Data Analysis and Modelling Techniques, Data Mining, Artificial Intelligence, Neural Networks, Machine learning, Numerical methods

CVR College of Engineering (JNTUH), Hyderabad, India   Aug 2016 – Aug 2020
Bachelor of Technology in Computer Science and Engineering   **GPA:3.8/4**

Technical Skill Set

Programming Languages:	Java, Python, C++, Golang
Database & Servers:	MySQL, MongoDB, PostgreSQL, Cassandra, Oracle
Software Framework:	Spring Boot, JUnit, Django, Mockito, .Net, ADO.Net
Web Development:	JavaScript,Typescript, REST API, PHP, ReactJS, NodeJS, Angular, HTML5, CSS
Containers/Cloud:	AWS, Azure, Docker, Kubernetes
Tools:	IntelliJ, VS Code, Jenkins, Git, Gitlab, Bitbucket

Work Experience

Web Developer, *University of Texas at Arlington, USA*   Feb 2023 - June 2023
- Spearheaded the development of over 20 front-end and backend components for the college website using **.NET**, **C#**, **JavaScript**, **HTML5**, and **CSS3**.
- Crafted captivating user interfaces and designed forms, resulting in a remarkable 30% increase in user engagement.
- Documented and resolved more than 50 customizations and technical issues across the site, ensuring seamless user experience.

Software Engineer, *Hopnet Communications LLP, India*   March 2021 – Apr 2022
- Engineered end-to-end search features for both mobile and web applications using **React Native**, **ReactJS**, & **TypeScript**, elevating user engagement by 30% and search accuracy by 20%.
- Implemented comprehensive test cases using **Jest** for both platforms, achieving 90% code coverage and reducing the number of reported bugs by 50% post-release.
- Orchestrated deployment and maintenance of cloud infrastructure using **AWS Cloud Development Kit**, ensuring project scalability and reliability.
- Developed and maintained **GraphQL API**s using **Apollo Server**, providing efficient and flexible data retrieval for our Frontend Management Console Application.
- Created monitoring and logging dashboards using **AWS CloudWatch** to identify and troubleshoot potential issues in production.

Software Engineer, *Citratek, India*   May 2019 – March 2021
- Collaborated with Agile teams to develop and maintain **microservices** based applications using **Spring Boot**, ensuring on- time project deliveries and implementing Continuous Integration/Continuous Deployment (CI/CD) pipelines with **Jenkins** for streamlined development processes..
- Optimized **React** to improve UI/UX, resulting in a 20% reduction in page load times and a 15% increase in mobile user engagement.
- Utilized expertise in the **Spring Framework** to enhance system efficiency, achieving 25% faster API response times and reducing security vulnerabilities by 30% using **Spring Security**.
- Managed **Cassandra** databases proficiently to increase data precision and query performance by 10%.
- Deployed applications on **AWS (EC2, S3)** to achieve a 15% boost in system uptime and reliability, while reducing security incidents by 25% through AWS security features.
- Designed **RESTful APIs** to facilitate efficient data transfer between server-side and client-side, enhancing overall system performance.

Academic Projects

UTA MS CS Website (HTML, CSS, React, PHP, Node.js, Laravel, MongoDB)
- Constructed a dynamic web application during my Web Development Course, leveraging HTML/CSS/JavaScript alongside React.js, Node.js, PHP, Laravel, and MongoDB.
- Deployed the application on UTA Cloud for seamless accessibility.

Cloud Native Monitoring Application (Python, Kubernetes, AWS)
- Created a monitoring web application using Python with Flask and psutil.
- Containerized the application with Docker and locally built the image.
- Established an AWS Elastic Container Registry (ECR) using Python's Boto3 module and pushed the image.
- Deployed the application on an AWS Elastic Kubernetes Service (EKS) cluster with nodes.

Retail Web Application (PHP, MySQL, Azure)
- Utilized PHP and MySQL as the database management system to develop a retail web application.
- Deployed the application on the Azure cloud platform following DevOps methodology and agile principles.
- Automated the application build, test, and deployment processes by implementing Continuous Integration and Continuous Deployment (CI/CD) using Azure DevOps.
- Configured an Azure App service to host the web application and integrated the necessary dependencies using NPM.

Certifications

- AWS Certified Cloud Practitioner
- Full Stack Developer – Java, Restful WS, JSP, Spring by Mosh

Extracurricular

- Active member for the Google Developer Student Club at The University of Texas at Arlington participating in various tech-focused projects and events.