

Girija Polamreddy

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EDUCATION

University at Buffalo, Buffalo, NY **GPA 3.5/4.0**
Master of Science in Computer Science Jan 2022 - May 2023 (exp)
Coursework: *Analysis of Algorithms, Introduction to Machine Learning, Project Development Data Intensive Computing, Data Models and query Language, Introduction to Pattern recognition, Modern Networking Concepts.*

GITAM University, Bengaluru, India **GPA 3.7/4.0**
Bachelor of Technology in Electronics and Communication Engineering Aug 2016 - May 2020.
Coursework: *Data Structures & Algorithms, Programming with C, Object Oriented Programming through C++, Java, Operating Systems, Design and Analysis of Algorithms, Computer Networks, Computer Organization & Architecture.*

TECHNICAL SKILLS

Languages: C, C++, Java, Python
Databases: MySQL, MongoDB, PostgreSQL, Redis
Web Technologies: HTML5, CSS3, Bootstrap, GraphQL, Rest API, Apache Kafka, PHP
Frameworks: Node.js, React.js, Redux, Express, Passport.js
Tools: Git, Visual Studio Code, Eclipse, Postman, JIRA, JMeter, Mocha, Junit.
Deployment: AWS Cloud (S3, RDS, EC2, ECS), GCP, Docker, Kubernetes

WORK EXPERIENCE

Programming Assistant | [Moore Archive](#) | **University at Buffalo, New York** **Feb 2022 – Present**
• Collaborated with a team of 6 for refactoring and optimizing the code before each build release to user acceptance testing (UAT).
• Functioned on development of login system and scholarship module using PHP framework, ran on Apache, connected to the MySQL server, and solved the frontend bugs using HTML5, CSS3, Bootstrap, and jQuery.

Programmer Analyst | [Cognizant](#) | **Bangalore, India** **Dec 2020 - Jan 2022**
• Collaborated with a team of 5 members and worked on the development of an E-learning web application using the MERN stack.
• Structured new functionalities and **RESTful** web APIs by **30%** for accurate response object defining.
• Spearheaded functionalities like a user-specific dashboard, study mode, exam mode, and quiz sections. Itemized marked courses as favorites for easy accessibility and a search field for filtering the course content that responds under **300ms**.
• Remodeled the application dashboard, study, and exam mode sections by resolving **15+** defects with **0** escalations and client issues.

Software Engineer Intern | [Brainovision Solutions](#) | **Hyderabad, India** **Feb 2020 - Jul 2020**
• Maintained and enhanced the performance of the backend by **30%** of a logistics-based web application.
• Innovated new functionalities, backend in **Node.js**, **MySQL** from scratch that shows information about all the bookings.
• Accelerated Redis for caching mechanism and structured 10+ **RESTful** APIs by optimizing all APIs response time below 300ms.

PROJECTS

Developers Community | (*ReactJS / NodeJS / MongoDB / MySQL / Apache Kafka / Redux / AWS / Rest API / Redis*).
• Designed an interactive chat system, initiated modules like posts, bookmarks, and utilized **NGINX** to improve security by 50%.
• Deployed 3-tier distributed app with message queues as middleware and scaled to handle a load of **10,000** questions simultaneously.
• Enforced Kafka in 3 servers for request-response cycle and increased by 40% when tested with **10,000** concurrent users (**JMeter**).
• Expedited Redis for the faster response time (**15-30%**) on the pages and **React.js** (*frontend*), **Node.js** (*backend*), and **Redux** to manage the workflow of frontend data, databases in **AWS RDS**, **Junit Testing**, and **AWS** deployment.

Ecommerce Marketplace | (*ReactJS / NodeJS / MongoDB / MySQL / Kafka / Redux / AWS / Rest API / JMeter / GraphQL*).
• Developed a full-stack distributed prototype of the Etsy marketplace application scaled to handle over **10,000** users and products.
• Hosted application & database on the **AWS** cloud with **MongoDB** replica set clusters and handled fault tolerance for EC2 instances during partition of database servers and effective load balancing using **AWS ELB** & facilitated Redux for global state management.
• Devised **Express**, **Node.js** as a backend server, **Kafka** messaging queue for request-response cycle, **Passport.js** for authentication.

Sorting Visualizer | (*HTML, CSS, JavaScript*)
• Visualized different sorting techniques (Bubble, Merge, Selection, Insertion) in real-time using web application.

CERTIFICATIONS AND ACHIEVEMENTS

• Published a paper on [Automatic Street light Control System with and without IOT](#) in [IJETER](#) | Volume 8. No. 5, May 2020.
• Awarded merit scholarship during bachelors for receiving a top 5% grade at GITAM University.
• Rewarded PRIDE connect award for delivering a critically acclaimed project and granted best Technical Associate among 80 graduate joiners at the cognizant.