

Chaturved S Lakkaraju

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EDUCATION

The Pennsylvania State University

Bachelor of Science in Computer Science and Mathematics. GPA: 3.64

University Park, PA

Aug. 2019 – Dec. 2022

WORK EXPERIENCE

Software Engineer

Inventsoft

Feb. 2023 – Present

Round Rock, TX

- Designed a purchasing journey for business partners by collaborating with cross-functional teams and adhering to agile methodologies to ensure alignment with organizational and user needs.
- Revamped the checkout page using Angular, introducing multiple payment options, which resulted in a 30% increase in sales and enhanced scalability through micro frontends.
- Improved page load times, implemented robust error-handling mechanisms, and integrated analytics, leading to a 25% increase in user satisfaction and a 15% reduction in system downtime.
- Engineered a robust REST API on .NET to facilitate transactions within a microservices architecture, successfully handling over 10,000 daily transactions.
- Developed and maintained automated tests using Playwright, achieving a 40% reduction in end-to-end regression testing efforts.

Teaching Assistant

The Pennsylvania State University

Aug. 2020 – Dec. 2022

University Park, PA

- Offered guidance to over 200 students in programming classes and assisted more than 150 students in calculus classes.
- Held regular office hours to support students' learning processes and address queries related to the assigned coursework.

TECHNICAL SKILLS

Languages:	TypeScript, C#, C, C++, HTML/CSS, Python, Java, SQL
Frameworks & Libraries:	Angular, .NET, React, Node.js, Express
Tools:	Git, Visual Studio Code, Visual Studio, Jira, Confluence
Testing & Monitoring:	Jasmine, xUnit, Playwright, Postman, Splunk, Dynatrace, Elasticsearch

PERSONAL PROJECTS

Cooking Bot | React Native, TensorFlow.js, C++, Firebase

- Spearheaded a team in a hackathon, delivering an innovative solution for kitchen safety and culinary enhancement.
- Engineered an IoT device empowered with microcontrollers & sensors, enabling real-time monitoring of cooking conditions, ensuring unparalleled safety.
- Crafted an intuitive user interface with React, granting seamless access to plots, recipes, and dietary options, elevating user engagement.
- Leveraged advanced predictive analysis techniques through random forest models, to optimize cooking parameters, guaranteeing exceptional culinary outcomes.

Concurrent Communication Engine | C

- Developed a thread communication API, inspired by Go Channels, facilitating safe data exchange between concurrent threads.
- Implemented functionalities for both blocking and nonblocking data transfer, supporting send, receive, and select operations.
- Ensured thread synchronization using mutexes and condition variables to prevent race conditions and deadlocks.

Dynamic Memory Allocator | C

- Starting from the ground up, aimed at building standard library allocation functionalities: malloc, free, and realloc.
- Implemented memory allocation algorithms such as Best First and Next Fit to minimize fragmentation.
- Utilized profiling to organize free memory blocks by chunk sizes reducing overhead and enhance throughput, resulting in faster memory allocation and search time.
- Conducted thorough testing, performance benchmarking, and maintained documentation.