Gowri Sankar Koushik Pasumarthy

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EDUCATION

SUNY Stony Brook University, Stony Brook, NY

Aug 2023 - Dec 2024

GPA: 3.78/4.00

Master of Science in Computer Science

Course Work: Theory of Database, Machine Learning, Data Science, Analysis of Algorithms, Data Visualization, Data Structures, Object Oriented Programming

SKILLS

- Languages: Java, C++, Python, C, C#, Go, JavaScript, TypeScript, SQL, NoSQL, HTML, CSS
- Technologies/ Frameworks: Bootstrap, Redux, REST, Node.js, Express JS, Flask, Django, React, Angular, Vue, Spring Boot, Elastic Search, Maven, Postman, Junit, Mockito, Kafka, Redis, RabbitMQ, Relational Databases, MySQL, MongoDB. DynamoDB, PostgreSQL, Linux, Distributed Systems, Grafana, GraphQL, Prometheus, Load balancers, Agile methodologies
- Cloud/ DevOps: Microsoft Azure, AWS, GitHub, Jenkins, Docker, Ansible, Terraform, Kubernetes, ArgoCD, Pipelines, CI/CD
- Salesforce Tools: Salesforce CLI, Salesforce CRM, Apex, LWC, Salesforce Data Loader, Visualforce, Triggers, SOSL, SOQL
- Development Tools: Visual Studio, Git, Eclipse, Code: Blocks, IntelliJ, Lightning Studio, Jira, Slack, Figma

EXPERIENCE

Stony Brook UniversityJan 2024 - PresentResearch AssistantUnited States

- Developed an application for Stony Brook Hospital to efficiently manage Electronic Medical Records (EMRs), parsing PDFs using the **PvPDF** library and segmenting them based on encounter ID reducing manual data entry time by 70%
- Achieved a 50% improvement in data retrieval speeds through MongoDB indexing and advanced query optimization.
- Utilized **Apache Hive** on **HDFS** for structured querying of EMR data and integrated the system with the hospital's Microsoft SSO and **OAuth** for secure access.
- Designed a user-friendly web interface using React and Flask facilitating easy retrieval and navigation of patient records by 40%

The Integrity Company

May 2024 - Aug 2024

Ocean Side, CA

Software Engineer Intern

- Developed a comprehensive translation services platform integrating **React.js** (front-end), **Django** (back-end), and **MySQL** database, achieving a 30% increase in operational efficiency and facilitating seamless communication between insurance companies and translators.
- Implemented secure user authentication and developed **REST APIs** using **Auth0**, ensuring robust data protection and facilitating efficient communication between cross-functional teams of front-end and back-end systems.
- Integrated **Salesforce CRM** with **Valuetext.io** and **Schedul-o-matic 9000**, automating key sales processes using **Process Builder** and **Flow**, deploying with **change sets**, and ensuring seamless data flow and synchronization between orgs, improving efficiency by 40%
- Leveraged **Figma**, **Notion**, **Jira**, **and Slack** for project management, issue tracking, and team collaboration, supporting **Agile methodologies** and increasing project delivery speed by 40% and ensured effective version control using **Git**.

Bajaj Finserv (FinTech)Software Engineer Intern

Jan 2023 - Jun 2023

Bangalore, India

- Enhanced the frontend POS loan application interface using **Salesforce LWC**, **Lightning App Builder**, and **Lightning Studio**, achieving a 90% boost in responsiveness and visual appeal across web and mobile platforms.
- Engineered robust **Apex Triggers** and developed 50+ **unit tests** and **test classes**, ensuring high code coverage, maintaining Salesforce testing standards, and delivering high-quality apps that improved productivity and customer trust.
- Implemented a **CI/CD** pipeline using **GitLab** and **Salesforce DX**, automating testing and deployment processes, reducing release cycle times by 50%, and enhancing code quality and reliability.
- Architected and maintained microservices using Java **Spring Boot**, integrating **REST** APIs, and utilizing **Kafka** for real-time data streaming, contributing to the success of a 3-in-1 application with over 100 million downloads on Google Play Store.
- Deployed applications on **Docker** containers, enhancing infrastructure scalability and efficiency while managing **CosmosDB** for optimized data storage and retrieval.
- Executed CI/CD pipelines using Azure DevOps, streamlining integration and delivery processes, and boosting deployment by 30%

PROJECTS

Farm Fresh: Streamlined DevOps for E-commerce

- Engineered 'Farm Fresh' application using **Java**, **Spring Boot**, **React**, and **Hibernate**, enhancing search functionality with **ElasticSearch** and ensuring scalability with **MongoDB**, achieving user satisfaction.
- Enhanced **RESTful APIs** with **JWT** authentication and **PostgreSQL** for efficiency data management.
- Adopted **GitOps** practices with **ArgoCD**, automating CI/CD pipelines with **Jenkins** and **Kubernetes**, reducing deployment time.
- Monitored performance with **Prometheus** and **Grafana**, providing real-time issue resolution, data visualization and alerts.

Distributed Banking System

- Implemented a modular and scalable **microservices** architecture using **Java**, **Spring Boot**, and distributed database **Cassandra**.
- Utilized Apache Kafka for asynchronous communication and RPC, ensuring decoupling and improved data flow management.
- Employed **Zookeeper** for service discovery and coordination, used **Docker** and **Kubernetes** for consistent and scalable deployments.
- Developed robust **RESTful APIs** for inter-service communication and client interactions, monitored with **Prometheus** and **Grafana**.
- Ensured system reliability through **GitHub Actions** for **CI/CD**, complemented by comprehensive testing with **JUnit** and **Mockito**.