Priyadharshini Damodharan

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Education

Washington State University Present

Master of Science in Computer Science

- Coursework: Advanced Algorithms, Software Design and Architecture, Machine Learning, Artificial Intelligence

Anna University - Sri Sairam Institute of Technology 2016 – 2020

Bachelor of Engineering in Computer Science and Engineering

Work Experience

Software Engineer Jan 2021 – Aug 2023

Sopra Steria *Chennai, TN*

- Implemented RESTful APIs and redesigned Android applications, achieving a 20% improvement in app performance and reducing load times by 3 seconds, significantly enhancing user experience.
- Designed interactive visual products and analytical dashboards to analyze performance trends and operational risks, garnering over 5,000 internal views within 6 months.
- Shadowed Product Manager, conducting user segmentation research with 40+ charities and prioritizing the rollout of a food donation feature, increasing engagement by 64% and reducing support tickets by 29%.
- Led bi-weekly tech talks, sharing app and API performance insights with 45+ stakeholders and team members, fostering collaboration that reduced operational tickets by 80%.
- Mentored junior developers, accelerating their learning and improving their technical proficiency by 25% within 6 months.

Projects

Bullet Hell Shooting Game Jan 2024 – Apr 2024

Washington State University

- Managed a team of four in designing and developing a bullet hell shooting game inspired by the Touhou Project using Java & LibGDX, implementing collision detection and hitbox functionality for player and enemy projectiles.
- Built a playable game that showcased advanced software architecture and design patterns, utilizing Factory, Abstract Factory, State, Composite, Builder, and Singleton patterns.
- Engineered a level interpreter that parses JSON files to dictate AI behaviors, enabling customizable enemy movements and attack patterns for dynamic gameplay.

E-Wallet Jan 2022 – Mar 2022

Geeks for Geeks

- Built a comprehensive web application for an e-wallet system, employing Spring Boot-based microservices to create a scalable backend architecture.
- Designed RESTful APIs for seamless interaction between front-end and back-end, leveraging Hibernate for ORM and MySQL for robust data storage.
- Integrated Redis for caching, Kafka for messaging, and OAuth 2.0 for secure authentication, enhancing performance and ensuring robust security measures.

Next Word Predictor Jan 2021 – Oct 2021

Data Science Specialization

- Developed a Shiny application utilizing a text prediction algorithm to forecast the next word(s) based on user input, improving user interaction.
- Implemented an N-Gram Language Model for the prediction algorithm, optimizing for speed and accuracy to enhance suggestion quality.
- Ensured a responsive user interface with efficient backend processing that minimized latency in word prediction for an improved user experience.

Technical Skills

Languages: Java, Object-Oriented Programming, Data Structures, SQL
Frameworks: Spring Boot, RESTful Web Services, Microservices, Android Development
Others: Splunk, Tableau, Postman, Git, Kafka, Redis, Maven, Gradle
Other Skills: Technical Documentation