SUMANTH DASI

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EDUCATION

Master's in Computer and Information Science, Expected December 2023
University at Buffalo, The State University of New York GPA: 4.0 / 4.0

Bachelor of Science in Computer Science, June 2019
SASTRA University GPA: 8.38 / 10.0

EXPERIENCE

Software Engineer, SS&C Eze, Hyderabad, Telangana, India, June 2019 - August 2022

- Collaborated seamlessly within a dynamic team of 4 to shape Eze mobile app, a pioneering platform for stock trading and portfolio management, harnessing power of React Native for a seamless cross-platform experience.
- Designed captivating, responsive UIs on app with React.js, for enhanced user experience.
- Utilized Go language and micro services to craft highly scalable and performant backend APIs.
- Engineered secure token storage with Hardware Security Modules (HSMs), resulting in a notable 50% reduction in authentication latency, greatly improving user experience.
- Developed desktop applications using .NET, specializing in projects with extensive code bases.
- Designed and implemented a trader desktop configuration migration feature, streamlining user configuration transfer across devices, reducing up to 80% of manual configuration time.

Intern, SS&C Eze, Hyderabad, India, February 2019 - May 2019

- Collaborated in a team of 5 to implement an OAuth 2.0 server in ASP.NET.
- Authenticated and authorized a significant number of services with client credentials workflow, demonstrating OAuth 2.0's flexibility and scalability.

PROJECTS

Pintos (Operating System), Fall 2022

- Led a team of 3 to design a priority-based thread scheduler in Pintos, enhancing system performance and resource allocation.
- Mitigated priority inversion issues through priority donation mechanisms, ensuring fair resource access and resolving potential bottlenecks.
- Extended Pintos OS's capability by adding ability to run user programs, including passing arguments and system calls.

Performance study using MPI on disease simulation (High performance computing), Spring 2023

- Created a disease spread simulation, utilizing parallel processing on a supercomputer, resulting in a remarkable 90% reduction in runtime.
- Conducted an extensive analysis of communication overhead's impact on system performance, identifying 64 cores as optimal configuration for efficient parallel processing.

Raft (Distributed Systems), Spring 2023

- Developed a robust and fault-tolerant solution for achieving consensus in distributed systems through Raft consensus algorithm in Go language.
- Orchestrated four critical components of the Raft protocol: Leader Election, Log Replication, Log Commitment, and Client Interaction, guaranteeing reliable and efficient system operation.

TECHNICAL SKILLS

Languages: Java| C#| Python| Go| JavaScript| C++| SQL.
Frameworks: React Native| .NET| ReactJS with Redux| OAuth 2.0| MPI| OpenMP.
Databases: SQL Server| Postgres.