Naga Brahma Krishna Sumanth Dasi

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Education

- **University at Buffalo, State University of New York** — Buffalo, NY
  Master's in Computer and Information Science; GPA: 4.0 — *Aug 2022 - (Expected)Dec 2023*
  Courses: *Operating Systems, Distributed Systems, Parallel Algorithms, Analysis Of Algorithms,Databases*
- **SASTRA University** — Tamil Nadu, India
  Bachelor of Technology- Computer Science and Engineering; GPA: 8.33/10.0 — *Jul 2015 - Jun 2019*

Skills Summary

- **Languages** Java, C#, Go, C, Python, JavaScript, C++, SQL
- **Frameworks** React Native, .NET, React.JS, Node.JS, OAuth 2.0, MPI, OpenMP, Appium, Jest
- **Tools** GIT, Docker, Rancher, SQL Server, PostgreSQL, HashiCorp Vault, Splunk
- **Platforms** Linux, Web, Windows
- **Soft Skills** Problem-Solving, Time Management, Team Player, Adaptability, Accountability

Experience

- **University at Buffalo, State University of New York** — Buffalo,NY
  Teaching Assistant for CSE 4/531: Analysis of Algorithms — *Aug 2023 - Present*
  - Strong understanding of key algorithms, including sorting, searching, and graph algorithms, applying this knowledge to assess student work effectively.
  - Diligently graded assignments, exams, and projects, providing constructive feedback to guide students in their academic progress. Ensured fair and consistent evaluation, helping students achieve their best results.
  - Maintained a grading turnaround time of less than 1 week, delivering timely feedback to students.
- **SS&C EZE** — Hyderabad, Telangana, India
  Software Engineer (Full-time) — *Jun 2019 - Aug 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 preferment back-end 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 C# in .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.
- **SS&C EZE** — Hyderabad, Telangana, India
  Software Engineer - Intern — *Feb 2019 - May 2019*
  - Collaborated in a team of 5 to implement an OAuth 2.0 server using C# 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 (Kernel programming, Schedulers)**Led a team of 3 to design a priority-based 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 system calls. Tech: C++, GDB (Fall '22)
- **Parallel Simulation (Parallel Programming, High Performance Computing)** Created a parallel algorithm for disease spread simulation, utilizing parallel processing on a supercomputer through MPI library, 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. Tech: C++, MPI, OpenMP, Slurm. (Spring '23)
- **Raft (Distributed Systems, Distributed Consensus)** 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. Tech: Go Language. (Spring '23)

Honors and Awards

- Received the Dean's merit scholarship for academic excellence at SASTRA University. (2018)
- Received Employee Excellence award at SS&C EZE. (2019,2021)
- Received Team of the Quarter award at SS&C EZE for team's work on Eze Mobile App.(2021)