

# NAGA BRAHMA KRISHNA SUMANTH DAS

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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)

08/2022 - (Expected)12/2023

**SASTRA University**, Tamil Nadu, India  
Bachelor of Science in Computer Science (GPA: 8.38/10.0)

07/2015 - 06/2019

## TECHNICAL SKILLS

Languages: Java, C#, Python, Go, JavaScript, C++, SQL.

Frameworks and Libraries: React Native, .NET, ReactJS, NodeJS, OAuth, MPI, OpenMP, REST.

Databases: SQL Server, Postgres.

Tools: Git, Docker, Splunk, Swagger.

## EXPERIENCE

**SS&C Eze**, Hyderabad, Telangana, India  
*Software Engineer*

06/2019 - 08/2022

- 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.

**SS&C Eze**, Hyderabad, Telangana, India  
*Intern*

02/2019 - 05/2019

- 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 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.

**Parallel Simulation** (High performance computing)

Spring 2023

- 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.

**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.