

# SRINIVAS CHARAN MADU

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## EDUCATION

**Master of Science in Information Management**  
**Specialization in Data Science**  
**University of Washington, Seattle**  
Seattle, WA, USA  
Sept 2023 - Aug 2024

**Integrated Master of Technology in**  
**Computer Science and Engineering**  
**International Institute of**  
**Information Technology**  
Bangalore, India  
Aug 2015 - July 2020  
CGPA: 3.48/4.00

## SKILLS

**Languages:** Java, C#, C++, Python

**Libraries/Frameworks:** Swagger, React  
Native, D3.js

**Technologies:** Azure, Git, Docker

**Concepts:** Cloud computing, Software  
Engineering, Data Science, Data  
Visualization

## LEADERSHIP AND ACHIEVEMENTS

**Institute Gold Medal** for the All-Rounder of  
the year, i.e, graduating batch of 2020,  
awarded by IIITB.

**Entrepreneurial Lead** at GDC I-NCUBATE  
Cohort 10 (Bootcamp program for  
students with business ideas, by IIT  
Madras), representing the team Raydius, to  
develop the business model and customer  
validation of the team's idea.

**Elected member of the Student Activity**  
**Council** at IIITB for the year 2016.  
Coordinated with students and college  
administration relating to different student  
activities and events all around the year.

**Head of Aikyam** (Social Service  
Community of IIITB) for two years.  
Volunteered and led activities of the club  
like fundraisers, donation drives, blood  
donation camps and orphanage visits.

## WORK EXPERIENCE

### Microsoft

Aug 2020 - Aug 2023

#### Software Engineer

Hyderabad, India

- Designed and developed **Multi-user Authorization** feature for Azure cloud backup vaults, safeguarding over **2000 vaults** across nearly **400 subscriptions** against Ransomware attacks and malicious/accidental actions.
- Contributed to the integration of **Built-in Azure Monitor alerts** into Azure Backup, enabling alerts for critical backup security incidents and job failures, currently operational in over **1500 backup vaults** with ongoing expansion.
- Optimized the **Configure backup** operation for IaaS VMs with Azure Recovery Services Vault by identifying and resolving inter-service sync issues, resulting in an impressive **82% reduction in failure rate**.
- Improved the efficiency of rollover process and automated the cleanup for authentication certificates associated with Azure Workload containers, **saving 3 days** of effort of Azure Backup Ops team to manually rotate over **100 certificates** every month.

### IIITB Innovation Centre

Jan 2020 - June 2020

#### Product Developer Intern

Bangalore, India

- Developed Raydius : A Map-based digital platform to discover and share the happenings of a neighborhood.
- Conducted **Market Research** and customer discovery process through **75** interviews and constructed a business model for Raydius.
- Produced an MVP of the final product idea, a Cross-Platform Mobile Application (Android and IOS) using **React Native** and **NoSQL** database.

## PROJECTS

### TELECOMMUNICATION SPECTRUM DATA VISUALIZATION

- Implemented run-time visualization of Indian telecom spectrum data using **D3.js** for frontend visualization and **Java** for backend.
- Built a continuous deployment pipeline (CDP) using **Jenkins, Docker, ELK and AWS** to collaborate with team, and then deployed the end result on Netlify.

### AGENT BASED MODELING OF DRUG RESISTANT DISEASES

- Developed an **Agent-Based model** to simulate the onset of drug resistance in the tuberculosis bacteria and subsequent spread of tuberculosis among humans in a constrained environment.
- Used **GIS data** of an urban environment to emulate human movement and the rate of spread based on the type of location.
- Used **Java, Python** and Repast City Framework for the model development and data visualization.