

# Sai Arathy Chava

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## EDUCATION

### University of Florida

August 2023 - May 2025

*Masters Degree, Computer Science (GPA: 3.94 / 4.00)*

*Gainesville, FL*

**Involvement:** GHC 2024, Rewriting The Code, UF WiCSE, Operations Students Assistant in Housing & Residence Life

**Coursework:** Data Structures, Analysis of Algorithms, Computer Networks, Data Science, Software Engineering

### National Institute of Technology, Andhra Pradesh

August 2017 – June 2021

*Bachelors of Technology, Computer Science & Engineering*

*Tadepalligudem, India*

**Affiliations:** Joint Secretary of Computer Science & Engineering Association, Event Management Lead of Student body

**Coursework:** Object Oriented programming, Modern Application Development, Cloud Computing, Machine Learning, AI

## TECHNICAL SKILLS

**Languages:** C/C++, Python, Kotlin, Java, HTML, CSS, Javascript, Typescript, Ruby

**Frameworks/Tools:** React, React Native, Next.js, Express, Tailwind CSS, GraphQL, Spring Boot, TensorFlow, .NET, Cloudinary, Tableau, Microsoft Office, Gradle, Jira, Source control - Git, Android Studio, T3 Stack, AJAX, Axios, Linux(Ubuntu), Supabase

**Databases:** MySQL, NoSQL, Prisma, MongoDB, PostgreSQL, SQLite

## WORK EXPERIENCE

### University of Florida

July 2024 – Present

*Web Developer, Graduate Student Assistant*

*Gainesville, FL*

- Spearheaded the development of a **React** interface for the **CERES-Maize model** using **TypeScript** and **Framer Motion**.
- Integrated **Tableau** for dynamic data visualization, facilitating the exploration of 3 distinct agricultural scenarios.
- Managed the **software development lifecycle** from planning to deployment, achieving 99.9% uptime with **AWS Amplify**.

### Deloitte Consulting LLP

July 2021 – July 2023

*Android Developer*

*Hyderabad, India*

- Engineered 5+ custom Android apps for Fortune 500 clients using **Java & Kotlin**, employing **Clean Architecture** and **MVVM** in an **Agile framework**, serving associates in over 1,000 stores across 16 states.
- Refactored 70% of the UI codebase from XML to **Jetpack Compose**, improving UI performance and responsiveness.
- Optimized data handling by integrating **GraphQL** and **REST APIs** with **Retrofit** and **OkHttp** using Coroutines and flows.
- Leveraged **Koin** and **Dagger** for dependency injection, reducing boilerplate code by 30%.
- Improved app reliability with **JUnit tests**, raised **code coverage to 85%**, and conducted **code reviews** to ensure standards.
- Utilized **Firebase Analytics** to track user interactions and monitor app crashes, and streamlined deployment with **GitHub Actions CI/CD** and JFrog Artifactory.
- **Collaborated with cross-functional teams** and onboarded 3 members, providing KTs for seamless integration.

### National Institute of Technology

May 2019 – July 2019

*Research Intern*

*Warangal, India*

- Presented an ensemble-based workload forecasting method using **LSTM** and **Random Forests** in **Python**
- Reduced error rates by **15%** through optimized prediction models and **dynamic resource management**.

## PROJECTS

### Online Learning Platform | React, Node.js, MongoDB, AWS

- Developed a responsive e-learning platform, managing **AWS S3 storage** for efficient content delivery.
- Deployed on **AWS EC2** with 99.87% uptime during testing, ensuring high availability.

### GatorLibrary | Java, Red-Black Tree, Binary Min-Heap

- Reduced book search and update times by **40%** using **Red-Black Trees** with **O(log n)** complexity.
- Improved request handling and cut wait times by **30%** using **Binary Min-Heaps**.

### Chord Protocol P2P Simulation | F#, .NET, AKKA, Distributed Systems

- Built a scalable **P2P lookup service** using the **Chord protocol** in F#, with **multithreading** for 1000+ nodes.
- Optimized **data structures** for **consistent hashing** and **finger tables**, achieving **O(log N)** time.

### RealTime Chatting Application | Java, TCP, UDP Sockets, Multi-threading

- Built a client-server chat app for messaging and file transfer using **TCP sockets**, handling 50+ concurrent connections.
- Optimized data exchange with dedicated read/write threads, boosting transmission efficiency by 25%.