

# Sai Manikanta Karnati

📞 919-538-5336 — ✉ karnatisaimanikanta123@gmail.com — 💻 <https://www.linkedin.com/in/sai-manikanta-karnati-9a62601b1/>

**Summary** — Experienced Software Engineer with over 2 years of expertise in application development, testing, and optimization. Proven track record in leading the end-to-end development process, including planning, coding, and deploying core software modules. Skilled in object-oriented design and software architecture, with a focus on creating efficient, scalable, and maintainable solutions. Adept at debugging and project management, with a strong ability to deliver high quality results under tight deadlines. A meticulous and collaborative team player, dedicated to driving innovation and contributing to organizational success.

## Skills

**Cloud:** AWS

**FrontEnd:** HTML, CSS, VueJS, ReactJS, AngularJS, Quasar, Material UI, Tailwind, SAP UI5

**BackEnd:** NodeJS, Spring Boot, Express JS, Meteor JS, Firebase

**Databases:** SQL, MongoDB

**Languages:** Javascript, Java, Python

**Automation:** Playwright

**Others:** JIRA, Confluence, BitBucket, Git, VS Code, Agile Methodologies

## Experience

### University Of North Carolina At Charlotte

08/2024 – Current

*Graduate Teaching Assistant*

- Assisted in the delivery of graduate-level coursework, focusing on algorithm design, data structures, and their applications in solving complex computational problems.
- Led weekly discussion sections, providing in-depth explanations of course material and facilitating hands-on coding exercises to enhance student understanding.
- Developed supplementary instructional materials, including problem sets, study guides, and lecture notes, to support diverse learning styles.
- Graded assignments and exams, offering constructive feedback to help students improve their coding skills and algorithmic thinking.
- Collaborated with the professor to refine course curriculum and incorporate current research trends in computer science.

### Xebia

08/2022 – 12/2023

*Associate Software Engineer*

- Developed reactive features and re-architected existing ones using Pub-Sub models for enhanced performance.
- Built REST APIs with Node.js and Express for seamless backend functionality.
- Implemented Design Patterns to create intricate application features
- Optimized MongoDB queries by implementing indexes and utilizing MongoDB Atlas Search, a cloud service, resulting in a 15% increase in data retrieval speed.
- Improved database performance significantly.
- Worked on the architecture by using Design Patterns to design complex and robust features in the application.

### Xebia

08/2021 – 07/2022

*Engineer Trainee*

- Led a small team in the successful development of a banking application by using React in the front-end and Java for the backend during this tenure.
- Proficient in guiding projects to success through collaborative efforts, strategic planning, and technical acumen.
- Participated in code reviews to ensure code quality and adherence to coding standards.
- Delivered high-quality software within the allocated time and resources.
- Performed debugging and troubleshooting of existing software programs.

## Education

### University Of North Carolina At Charlotte

*Master of Science in Data Science*

*Minors: Database Systems, System Design And Implementation, Big Data & Cloud Computing*

### CMR Engineering College

*Bachelor of Technology in Computer Science and Engineering*

*Minors: Algorithms & Data Structures, Java, Machine Learning*

## Certifications

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- Infosys - Infosys Certified Software Programmer
- MongoDB - MongoDB Certified Developer
- AWS - AWS Academy Graduate - AWS Academy Data Engineering
- Java - NPTEL certified Java Developer
- AWS - AWS certified Developer Associate

## Projects

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### Snapstore

- User Authentication and Profile Management: Implemented secure user registration, login, and profile management features, utilizing Firebase Authentication for session management.
- Post Creation and Interaction: Developed features that allow users to upload images, post content, and engage with other users by liking, commenting, and following/unfollowing them.
- Real-time Chat Functionality: Implemented the chat feature, enabling users to send real-time messages using Firebase Realtime Database or Firestore.
- Frontend Development: Worked on the user interface (UI) with technologies like React.js to ensure a user-friendly experience while interacting with posts, profiles, and chats.
- Backend Development: Integrated the backend using Node.js and Firebase to handle data operations, ensuring efficient data storage and retrieval.

**Link:** <https://snapstore-codesnap.netlify.app>

### Snake game

- Designed and implemented a classic Snake game using Java Swing. Developed core game mechanics, including user input handling, collision detection, and score tracking. Focused on creating an engaging user interface and smooth gameplay experience, enhancing programming skills and understanding of object-oriented design principles.

**Link:** [https://github.com/SaiManikanta1918/snake\\_game](https://github.com/SaiManikanta1918/snake_game)

### Online Tshirt Store

- Developed a full-stack e-commerce application for selling custom t-shirts using the MERN stack (MongoDB, Express.js, React, Node.js).
- Implemented features such as user authentication, product management, and a shopping cart system, ensuring a seamless user experience, responsive design.

**Link:** [https://github.com/SaiManikanta1918/Tshirt\\_store](https://github.com/SaiManikanta1918/Tshirt_store)

### Decentralized application(blockchain)

- Developed a decentralized application using Solidity on the Rinkeby testnet, leveraging Ganache CLI for local blockchain simulation. Participated in the Virtusa Codelite Hackathon, focusing on smart contract development and integration. Successfully implemented features for secure transactions and user interactions, demonstrating a strong understanding of blockchain technology and decentralized solutions.

**Link:** <https://github.com/SaiManikanta1918/Dapp-bookstore>