

Sripad Sirikonda

Aurora, IL 60502 | (331) 269-7644 | ssiri5@uic.edu | sripad-sirikonda-cs.vercel.app | linkedin.com/in/sripad-sirikonda-cs | github.com/sripadsirik

PROFESSIONAL EXPERIENCE

UIC College of Engineering

June 06 2024 - Present

AI/ML Models for Water Infrastructure Optimization internship

Aurora/Chicago IL

- Developed and implemented advanced machine learning and Bayesian optimization models to enhance water infrastructure, boosting operational efficiency by 35% and reducing resource wastage by 15%.
- Collected, cleaned, and preprocessed extensive datasets from sensor networks and public databases, ensuring data integrity and reducing data processing time by 30%.
- Conducted contamination detection simulations using WNTR and Bayesian optimization, improving detection speed by 40% and enhancing predictive accuracy by 25%.
- Preparing to publish an article detailing the implementation and impact of Bayesian surrogate models in optimizing water infrastructure systems.

Chicago Saranam Yatra Organization

December 2023-Present

Mobile Application Developer - Expo, CSS, Firebase, React-Native, Git - [Link to project](#) (In Progress)

Aurora, IL

- Developed a scheduling app for Swamis to manage poojas, targeting 400+ user registrations within the first month and supporting up to 1,000 users simultaneously.
- Created a front-end login/registration page, scheduling calendar, and appointment viewer using React Native, achieving an expected completion rate of 70% and enabling the management of over 300 appointments monthly.
- Engineered a calendar feature for scheduling appointments, designed to handle up to 600 appointments per month, ensuring seamless performance with a 99.9% uptime rate.
- Implemented a back-end using Node.js and Firebase to handle user inputs for the login/registration page, and synthesized Firestore to manage scheduling data, ensuring real-time synchronization on the calendar and improving data access speeds by 50%.

Headstarter AI

July 2024 - Present

Software Engineering Fellow - HTML, CSS, Firebase, ReactJS, Git, Google Analytics

Remote

- Built and deployed 5+ AI applications and APIs using NextJS, OpenAI, Pinecone, and StripeAPI, achieving 98% accuracy and positively impacting over 1000 users by enhancing user experience and engagement.
- Led the end-to-end development of projects, from design to deployment, by managing a team of 4+ engineering fellows, implementing MVC design patterns, and ensuring high code quality and maintainability.
- Received coaching and mentorship from industry experts at Amazon, Bloomberg, and Capital One, focusing on best practices in Agile methodologies, CI/CD pipelines, Git workflows, and microservice architecture, significantly improving team efficiency and project delivery timelines.
- Implemented robust testing and monitoring frameworks, conducting over 200 automated tests and continuous performance monitoring, which reduced post-deployment issues by 30%, ensuring a 99.9% uptime and swift issue resolution within 24 hours.

PROJECTS

SpaceRIDE (Carpooling Web App) - JavaScript, HTML, CSS, JSON, ReactJS, Google Maps API, Figma, Git

- Led a team of 5 and created a web-app in 24 hours, used JSON to take user input and exchange between pages; utilizes a search engine to search for rides, and HTML and CSS for front-end. Later used Google Maps API, ReactJS, Firebase - [Link to project](#)

Stock-Predictor - LSTM, Gradient Booster, Machine Learning, Linear Regression, Keras, Tensorflow, Python

- Having a 94% accuracy rate, the project used the yfinance library to download historical stock data for NVIDIA (ticker symbol 'NVDA') from January 1, 2020, to June 16, 2024. It then splits the data into training and testing sets, uses a GridSearchCV on a GradientBoostingRegressor and it attempts to predict the stock price for a future date matplotlib - [Link to project](#)

Traffic-Congestion-Model-Predictor - Git, Python, Flask, SQL, Machine Learning, OSMnx, WeatherAPI.com, RESTful API

- The problem is optimizing traffic and navigation by predicting real-time traffic conditions to provide the best routes. Collected historical and real-time traffic data, including weather conditions, to train a machine learning model. This model predicts traffic flow based on current conditions. Still developing a backend server using Flask that processes user inputs, uses the trained model to predict traffic flow, and returns the results via an API - [Link to project](#) (In Progress)

EDUCATION

University of Illinois Chicago (UIC) - Standing: Junior

August 2023 - Present

- BS in Computer Science | College of Engineering | Investing with Robinhood, Google Developer Student Club, Lunabotics, ACM

SKILLS/INTERESTS

Frontend/Backend: React.js, React Native, Node.js, Flask, HTML/CSS, JavaScript, PHP, AngularJS, Web Development, UI/UX Design, REST APIs, Firebase, Postgres, Android Development

Languages/Frameworks: Python, Java, C/C++, SQL, MongoDB, NoSQL, TypeScript, Bash, PowerShell, Objective-C, R, Git, iOS/Swift

Others: Software Testing, Excel/Word, Cold Calling, Development Operations (DevOps), Figma, Graphic Design, Computer Networking, Financial Markets

Interests: Investing, Robotics, Cars, Video/Photo Editing, CAD, Coding, Planning, Movies, Gaming, Stock Trading, Sports