

Chathrapathi Nikhil Kandagatla

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Education

California State University Fullerton, California

Jan 2023 – May 2025

Master of Science in Computer Science

VNR Vignana Jyothi Institute of Engineering and Technology, India

Aug 2016 – Sep 2020

Bachelor of Technology in Electronics and Communication Engineering

Skills

Programming Skills: JavaScript, React, Node, Express, Python, HTML5, CSS3, JSON, Kotlin, TypeScript

Databases: MySQL, MongoDB

Frameworks and Tools: Git, Tailwind, Bootstrap, Docker, Android Studio, Figma, Word Press, Postman, GSAP

Concepts: REST APIs, Web Scraping, Object Oriented Programming, Data Structures, Algorithms, Agile, Scrum, CI/CD

Experience

TATA ELXSI

Nov 2020 – Sep 2022

Specialist (WhiteHat Jr)

Bangalore, India

- Designed over 300 UI screens for teaching coding to kids, utilizing React.
- Redesigned and enhanced the home page of the WhiteHat Jr. website using HTML5, CSS3, and JavaScript, resulting in a 25% increase in user engagement.
- Devised a Python solution to automate the extraction of files and facilitate seamless file replacement across directories, reducing manual file management efforts and enhancing operational efficiency by 30%.

Specialist (Jaguar Land Rover Corporation)

- Developed and delivered five functional prototypes for infotainment systems using Android Studio and proto.io, ensuring alignment with client requirements and enhancing stakeholder engagement.
- Worked collaboratively with design and development teams to refine UI/UX elements, streamlining feedback processes and reducing design approval timelines by 15%.
- Created 10 detailed wireframes using Figma, laying the foundation for user-friendly UI designs that aligned with client specifications.
- Implemented functional testing resulting in an 18% decrease in software defects and improved product stability.

Projects

City Navigation and Emergency Route Planning / Python, React, Leaf JS, Material UI, CI/CD

- Built a simulation to explore the impact of real-time data on evacuation route planning and navigation systems.
- Utilized graph algorithms such as Dijkstra's and Floyd Warshall algorithms for network routing and finding shortest paths.
- Created a robust user interface using React and Material UI for simplified state management, data flow and optimized components.

Workodoro / Android Studio, REST API, Kotlin, XML

- Enhanced an innovative Pomodoro productivity app, featuring Google authentication for cross-device synchronization and an integrated to-do list for effective task management.
- Exercised a scrolling quote feature, utilizing RESTful APIs to fetch and showcase a rotating collection of over 1,000 inspirational quotes, enhancing user motivation and engagement throughout work sessions.
- Incorporated a unique motivational element by displaying a curated library of over 500 uplifting GIFs during break intervals, designed to boost user morale and engagement.

Stock Prediction / Google Colab, Streamlit, Pandas, Sci-kit

- Achieved a 66% accuracy in predicting stock prices by doing data pre-processing, feature engineering and regression analysis.
- Boosted financial modeling through application of statistical methods, yielding a 15% increase in market trend forecasting accuracy and enabling data-driven decision-making.
- Produced insightful visualizations, including time-series analyses and correlation matrices, to uncover patterns and trends.

H1b web extension / Python, Node.js, JavaScript, React, Tailwind, SQL, REST API

- Engineered a data pipeline to harvest and synthesize 500,000+ H1B sponsorship records from authoritative sources like the USCIS H1B Employer Data Hub and the US Department of Labor's H1B Disclosure Data.
- Implemented data filtering and organizing datasets, configuring a Node.js server with SQL queries and designing five RESTful APIs to enable efficient CRUD operations and optimize data retrieval and throughput.
- Built scalable endpoints with adaptive query logic to process exact matches, suffix-based searches, and broader patterns, increasing search accuracy by 95%.

Mood based music recommendation system / Python, REST APIs, React, Tailwind, Chat GPT

- Harnessed the power of ChatGPT API to build an intuitive mood analysis feature, capable of decoding subtle emotional nuances in user input and translating them into tailored music selections.
- Architected and implemented a sophisticated Spotify API integration, featuring secure authentication, music retrieval capabilities, and performance optimization techniques and also developed a chat interface with real time messaging capabilities.
- Developed a chat interface with real time messaging capabilities and a user friendly display for mood detection results.