# Chathrapathi Nikhil Kandagatla

Fullerton, CA | chathrapathinikhilk@gmail.com | +1 657-616-4929 | linkedin.com/in/chathrapathi-nikhil-k | chathrapathinikhil.github.io/Portfolio/

#### 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, HTML, CSS, JSON, Kotlin, TypeScript

Databases: MySQL, MongoDB

Frameworks and Tools: Git, Tailwind, Bootstrap, Docker, Kubernetes, Android Studio, Figma, Word Press, AWS

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

# Experience

TATA ELXSI Nov 2020 – Sep 2022

#### Software Developer (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%.

#### Software Developer (Jaguar Land Rover Corporation)

- Developed and delivered five functional prototypes for infotainment systems using Android Studio and proto.io, ensuring alignment with client requirements.
- 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, Material UI, CI/CD

GitHub Link

- 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 APIs, Kotlin, XML

GitHub Link

- 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, Python

GitHub Link

- 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, AWS, CI/CD

- 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 is server with SQL queries and designing five RESTful APIs to enable efficient CRUD operations and optimize data retrieval and throughput.

## Mood based music recommendation system / Python, REST APIs, React, Tailwind, ChatGPT

- 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.