ISHA PATRO

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PROFESSIONAL PROFILE

Full-stack developer with a mix of tech skills and financial know-how. I've progressed from intern to Software Engineer II, working on mortgage-backed securities and trading platforms. I approach every project with curiosity and determination, excelling in high-stress situations. With a keen interest in innovation and love for finance, I'm always seeking new ways to advance the fintech landscape.

SKILLS

Programming Languages: Python, JavaScript, C++, R
Web Development: React, HTML, CSS, Python (Backend), RESTful APIs, AG Grid, Streamlit
Data Science: Machine Learning, Data Mining, Large Language Models, Tableau, Dash, Microsoft Excel
Databases: MongoDB, SQL
Cloud: AWS

EXPERIENCE

J.P Morgan Chase & Co.

Software Developer Engineer - II   **Jan 2024 - Current**
- Project owner of Trade Activity Monitoring (TAM); reduced latency by 50% for compared to the legacy app, directly improving trade execution and monitoring on the trading floor.
- Modernized the Mortgage Matrix tool to enhance performance in real-world MBS trading. Achieved a 12% reduction in latency and supported over $5B in annual trading volume, with growing impact.

Software Developer Engineer - I   **Aug 2021 - Jan 2024**
- Developed and enhanced the Trade Reporting and Compliance Engine (TRACE), improving data processing efficiency by ~30% and supporting timely, accurate regulatory reporting for trade operations.
- Implemented improvements to streamline data processing and reporting workflows, contributing to more efficient and compliant trade operations.

Software Developer - Intern   **Jan 2021 - Jul 2021**
- Built a JIRA ticket management app that enabled bulk creation and updates, reducing ticket handling time by ~70% and improving cross-team collaboration at J.P. Morgan.

Amazon

ACMS Intern   **May 2020 - Jun 2020**
- Designed wireframes and contributed to the full lifecycle of a responsive Appointment Scheduler website, focusing on user needs and goals.
- Prepared the website for integration with Chime and implemented best practices to ensure a seamless user experience and robust functionality.

Octathorpe Web Consultant

Data Analyst Intern   **Apr 2019 - Jul 2019**
- Procured and analyzed data from diverse primary and secondary sources to extract insights contributing to a 15% increase in user engagement.
- Tracked Conversion, Retention, and Monetization metrics to provide a comprehensive analysis of business performance, supporting a 6% boost in revenue.

Collpoll

Data Engineering Intern   **Apr 2018 - May 2018**
- Extracted and analyzed large datasets; contributed to product strategies that improved feature adoption by 10% and increased active users by 18%.

PROJECTS

Minted Wealth 🔗
- A platform providing real-time stock market data, tracking users' financial journeys, and empowering informed financial decisions.

Cloud Generator - CG0R
- Designed an autonomous floating buoy system for oil spill cleanup and cloud formation acceleration.
    - Won 1st prize at Engineering Clinics Expo FALL-2018.

Autonomous humanoid robot
- Created a biped robot powered by Amazon's Alexa with custom skills using Raspberry Pi and Arduino.
    - Won 1st prize at Engineering Clinics Expo FALL-2017.

Fed Rate Cut 2020 vs 2024 🔗
- Analysed the contrasting impacts of Federal Reserve rate cuts in 2020 and 2024 on markets, investor sentiment, and economic stability.

TradePulse: SMA-Based Algo Trading on OANDA 🔗
- TradePulse is an algorithmic trading platform for EUR/USD on OANDA, combining SMA-based strategies, real-time trade monitoring, and ML-powered price predictions for smarter, faster decisions.

Echoes of Liberation Day 🔗
- An AI-powered project that generates dynamic financial reports by analyzing real-time stock market data and news

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PUBLICATIONS

Unlocking Financial Wisdom: Building Knowledge Graphs from Investopedia 🔗
- Built a financial knowledge graph by extracting, processing, and visualizing terms and definitions from Investopedia, integrated into Obsidian for interactive exploration.

EDUCATION

Bachelor's in Computer Science
Vellore Institute of Technology, AP
Aug 2017 - Jul 2021
- Completed 156 credits with an overall CGPA of 8.8

Senior Secondary Education
Khalikote University
Aug 2015 - Jun 2017
- Scored 75% in Science in the CHSE board
- Awarded a cash reward and laptop for academic excellence under the Biju Yuva Sashaktikaran Yojana

High School Education
D. A. V Public School
Aug 2003 - Jun 2015
- Completed high school education under the CBSE board, achieving a commendable CGPA of 9.6

BLOGS

- Unlocking the Power of Obsidian Vaults with Python: A Simple Guide to Supercharge Your Note-Taking! 🔗
- Breaking Down the 32nd Bond Price Format 🔗
- Fed Slashes Rates: What a Half-Point Cut Means for You and Your Wallet 🔗