ATHARVA CHIPLUNKAR

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PROFESSIONAL EXPERIENCE

Teaching Assistant (Programming, AI) | Rochester Institute of Technology   August 2024 – December 2024

Tech Stack – C, Python
- Mentored over 40 students in Programming and 30 students in AI, providing guidance on foundational concepts and practical implementations of AI algorithms and helping students fine-tune ML models for projects.

Software Engineer Fellow | Headstarter AI   July 2024 – September 2024

Tech Stack –React, TypeScript, NextJS, AWS, LangChain, Firebase, MUI
- Developed 5 AI solutions addressing real-world challenges, like pantry tracker and intelligent chatbots for customer support, leading to a 60% reduction in customer query response times and a 40% increase in pantry management efficiency.

Teaching Assistant (Algorithms) | Rochester Institute of Technology   January 2024 – May 2024

Tech Stack – Python, SML
- Supported 20+ students in understanding complex algorithms, aiding with assignments and grading them.

Software Engineer Intern | Getinge   May 2023 – August 2023

Tech Stack – Selenium, Java, Maven, TestNG
- Performed comprehensive system performance analysis by evaluating AI testing tools across 50+ scenarios, reducing testing errors by 30%. Documented the evaluation process and findings for team reference and future improvements.
- Collaborated with AI tool vendors to extract key insights, facilitating tool optimizations and integration improvements.

Software Engineer Intern | KubixSquare   August 2021 – October 2021

Tech Stack – React, GIT, JavaScript, CSS, MUI
- Led a team of 5 using Agile methodology to enhance collaboration and ensure timely project delivery.
- Engineered a scalable, user-centric web interface with optimized architecture, improving application performance by 45%.

PROJECTS

Career Assistant | [GitHub](#)   December 2024 – Present

Tech Stack – Python, PyTorch, RAG, React.js, TypeScript, PostgreSQL, Node.js
- Implementing automated systems leveraging Hugging Face models to analyze incoming resumes against detailed job specifications, improving processing efficiency and saving time on manual evaluations.
- Providing personalized improvement suggestions for resumes based on desired roles, enhancing the likelihood of applicants getting noticed.

Comparative Study of Image Similarity Models | [GitHub](#)   August 2024 – December 2024

Tech Stack – Python, Tensorflow, PyTorch, OpenCV, CUDA
- Proposed and open-sourced a comparative study of six image similarity models, focusing on optimizing PyTorch performance using CUDA to reduce computational time by 40%.

Flick List (Movie & TV app) | [GitHub](#)   April 2024 – July 2024

Tech Stack – React, LangChain, FastAPI, RESTful APIs, PyTorch, RAG, Vector Database
- Developed an app with a catalog of 9,000+ titles and 6,000+ cast members, maintaining data accuracy through weekly updates.
- Designed an intelligent recommendation system using retrieval-augmented generation (RAG) and Hugging Face models, boosting user engagement by 80%.

AutoTrack (Attendance Management System) | [GitHub](#)   January 2024 – May 2024

Tech Stack – DynamoDB, Rekognition, Lambda, Terraform, Amplify, API Gateway, S3, SES
- Architected a cloud-based system for real-time data processing, utilizing AWS services within a single region to ensure 99.99% uptime for over 1,000 daily users.
- Leveraged Terraform to automate infrastructure deployment, reducing deployment time by 90% and ensuring efficient resource allocation.

EDUCATION

Master of Science, Computer Science   **GPA: 3.63**
Rochester Institute of Technology   **December 2024**
Coursework – Object Oriented Design, Algorithms, Artificial Intelligence, Machine Learning, Cloud Systems, Big Data Analytics

Bachelor of Engineering, Computer Engineering   **GPA: 3.52**
University of Mumbai   **May 2022**
Coursework – Data Structures, Operating Systems, DBMS, Distributed Systems, Cloud Computing, Web Development, NLP

SKILLS

Languages: Python, Java, C, C++, SQL, JavaScript, TypeScript
Web Development: .NET, React, NextJS, FastAPI, Node.js, MUI, CSS, RESTful API, HTML
Cloud/DevOps: AWS, Terraform, Docker, CI/CD, Git
Data Science/ML: PyTorch, LangChain, Scikit-learn, TensorFlow, OpenCV, Hugging Face, Streamlit, Pandas, NumPy, CUDA
Databases: MySQL, PostgreSQL, MongoDB, Neo4j, Firebase
Testing: Selenium, TestNG, Unit Testing, Integration Testing