Arun Natarajan

B.Tech CSE NITC

in Arun Natarajan 🕥 ArunNats 🧽 arunnats2004

Education

National Insititute of Technology Calicut

Computer Science and Engineering

St Josephs Academy

98.4%

8.06 CGPA School and district topper School topper
B.Tech ISC - 12th Grade ICSE -10th grade
2022-2026 2020

Experience

St Joseph's Academy

95%

CoreStack

SWE Summer Intern

May 2024 - Present

- -Developed data generation programs based on the Azure CSP schema, encompassing over 50 correlated fields. These programs randomly generate data and calculate costs based on various input parameters to estimate user service billing.
- -Built FastAPI servers to provide API endpoints that accept date ranges, billing details, and product codes, generating cost per product and total cost over the billing period. Hosted sample data on MongoDB, enabling server caching.
- FastAPI, Python, MongoDB
- https://www.corestack.io/

Hardware Lab - CSED, NITC

Summer Intern

May 2024 - June 2024

-Wrote MIPS code and created extensive documentation to serve as study material for the Hardware Lab course at NITC. Worked on recursion and function parameter passing in MIPS assembly.

Hardware Lab Documentation

Projects

Movie Match - Backend Lead

Website which aggregates and provides streaming information about all movies.

Winners of Bit'N'Build International Hackathon 2024 Kerala State

- -Developed a Python script to collect and update data daily from multiple public internet sources, enhancing data availability and accuracy.
- -Built a responsive website backend using JavaScript with Node.js and Express, using a fuzzy search engine with Fuse.js that sorts by multiple filters and movie ratings, improving user search experience.
- -Integrated OpenAl API to provide personalized movie recommendations, offering tailored suggestions based on user preferences.
- javascript, MongoDB, OpenAI, python, nodeJS, fuseJS, Web Development

https://github.com/arunnats/movie-match

FLiX - Solo project

Machine Learning model to give movie recommendations

- -Developed Flix, a web app for movie recommendations, using Vite and React for a responsive user interface styled with Tailwind CSS. Built a collaborative filtering AI model using Python trained on the MovieLens dataset, hosted on a FastAPI server, to provide personalized book suggestions.
- -Stored movie data in a MySQL database, ensuring reliable data management. Data visualization was done through MathPlotLib and Seaborn.
- MySQL, ReactJS, Vite, Tailwind, Python, Machine Learning, Data Science, Web Development

https://github.com/arunnats/Flix

YouTube Video Conveter - Solo project

Web Application to Convert and Download YouTube Videos

- -Developed a YouTube video converter allowing users to convert video links into MP3 or MP4 formats of their choice, with video encoding handled by FFmpeg.
- -Hosted on Google Cloud Apps, ensuring scalability and reliability for multiple user requests. Built with Node.js running Express sessions to efficiently manage concurrent requests.
- JavaScript, FFMPEG, ExpressJS, Google Cloud Services, NodeJS, Bootstrap

http://yt-converter.arunnats.com/

Minutes Maker - Solo project

Web-app that generates minutes from uploaded audio

- -Developed a web app hosted on Google Cloud to automate meeting transcription and minute generation, integrating Deepgram Nova 2 for transcription and OpenAI GPT-3.5 for creating meeting minutes, with a user-friendly interface.
- -Built the backend with Node.js, using Express.js, Axios for API interactions, and Multer for handling audio file uploads to Google Cloud.
- OpenAl, Deepgram Nova, NodeJS, ExpressJS, Axios, Multer, Javascript, Web Development

https://minutesmaker.arunnats.com/

Skills

JavaScript	Python	С	C++	MySQL
MongoDB	NodeJs	ReactJs	FastAPI	Machine Learning
Data Science & Visualization	Content Writing	Digital Design & Video Editing	Marketing & PR	Talent Acquisition

Student Involvement

Computer Science and Engineering Association

Excecutive

-Hosted and taught a Verilog 101 introductory lecture to familiarize freshman students with the basics of their hardware courses.

-Organized and managed department events and designed merchandise.

FOSSCELL NITC

Design Head

- -Volunteered at the Linux installation drive
- -Volunteered to teach at " Git and Github basics" workshop
- -Participated in the organizing and design committee of FOSSMEET

Literary and Debating Club

Writer, Designer and Tech Team

-Designed and wrote articles published on the website and Instagram page and participated in debates and speeches

-Managed and hosted talk shows, open debates and cultural and literary programs