Naimish Mani B.

Mechanical Engineer | Climate Enthusiast

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Bio

I am a Mechanical Engineering graduate from SASTRA University. I have experience with Backend Development, Machine Learning, Numerical Methods, Signal Processing and CFD. I enjoy working on interdisciplinary projects where I can learn about various domains and expand my knowledge.

Professional Experience

RSKD LABS PVT. LTD. Innovations Lead

Aug 2023 – Present | Chennai

- Leading a team of 5 designers and developers to build full stack client facing applications with Figma, Vue.js and FastAPI, deployed on AWS.
- Implemented local RAG pipeline and trained vision models on top of YOLOv8 for image processing.
- Built desktop GUI apps with WxWidgets for internal tools.

EMSEC PVT LTD R&D Consultant

Aug 2023 – Jan 2024 | Remote

- Wrote ODE solvers and did signal processing in SciPy to solve real-world problems numerically.
- Designed UI Wireframes and closely monitored the development of the GUI products that interfaced with the numerical solvers.
- Led weekly scrum meetings and wrote internal documentation for the products.

DELOITTE USI Analyst

Nov 2022 – July 2023 | Mumbai

- Helped condense client requirements into a curated list of actionable items for the development team, saving weeks of effort.
- Conducted in-depth analysis of existing Integrated Eligibility Systems (IES) solutions to identify and address inefficiencies.
- Designed and developed RESTful APIs to convert monolithic IES systems into microservices using SpringBoot.

Projects

SEMI SUPERVISED CLASSIFICATION OF IMAGES SHOT BY CURIOSITY ROVER

Python, TensorFlow, Scikit Learn, Numpy, Pillow

- Used a Deep Convolutional Autoencoder to generate latent space representations of the images.
- Visualized the latent vectors with t-SNE and iterated through different architectures till the network learnt useful features.
- Used a Support Vector Machine to classify the latent space representations, achieving 94 % accuracy.

GROUND BASED CLOUD CLASSIFICATION USING CNNS Tflite, Jupyter, Android, iOS

- Designed and trained a CNN with TensorFlow Lite for ground based cloud classification, and achieved an accuracy of around 70%.
- Exported the model into an Android and iOS app, deployed the same.

Skills

PROGRAMMING

Python • MATLAB • C++ • C
SQL • R • Java

TOOLS

GitHub • Trello • Docker
AWS • Tableau • GitFlow

CERTIFICATION

Google Data Analytics Professional Certificate
AWS Certified Developer Associate

Education

SASTRA DEEMED TO BE UNIVERSITY

Bachelor of Technology, Mechanical Engineering

July 2018 - July 2022 | Thanjavur, India

School of Mechanical Engineering

Extra Curriculars

President, Stellaria, the Space Club of SASTRA

Head of Web Development, Google's DSC - SASTRA

Coursework

UNDERGRADUATE

- Production, Planning and Control
- Systems Modelling, Dynamics and Control
- Numerical and Statistical Methods
- Operations Research
- Industrial Robotics

Achievements

Finalist, Ad'Venture Pitch Fest • Speaker, DST-INSPIRE Camp • XPRIZE Visioneering design challenge Wiki winner