Nityananda R Hiremath

https://nityanandrh.github.io/Nitya-bio-2024/
nityanandhiremath7@gmail.com
+91 8073096318

Summary

I am an enthusiastic engineer with 4 years of industrial experience from mechanical design and analysis, specializing in Finite Element Analysis in early phases and moved to Machine Learning domain to facilitate AI based solutions to mechanical engineering problems. Proficient in learning latest tools and technology to solve the problems and to optimize existing product performance. Looking to contribute technical prowess and strategic problem-solving abilities to an innovative engineering team.

Experience

Pratt and Whitney, Bengaluru (12/2023 – till date)
Position: Methods Engineer (Python, JavaScript)

- Developed web-based 3D model renderer for post processing using Python VTK and VUTIFY libraries.
- Prepared and deployed a PCA model that calculates the data drift and retrains periodically from latest data.
- Implemented the idea of LLM in document classification using RAG architecture.
- Deployed ML model to predict oil leak event using xgboost and AWS.
- Created interactive graphical front end to perform series of activities using flask, JS Vue and Vue-flow

Quest Global, Bengaluru (07/2021 – 11/2023)
Position: Software Engineer (Python, APDL, VBA)
Client: IHI Aero Japan

- Developed simple desktop application to perform series of analysis with ease using python tkinter and APDL.
- Performed Creep analysis for various stage blades and helped customer to make quick design decisions.
- Created a ML model to detect defects in turbine blades and provide service manuals to repair, using python CV2 and yolo.
- Prepared APDL scripts for various analysis for quick and accurate results.
- Created automation scripts for report preparation with Python and VBA.
- Handled micro team of 2-3 members for several tasks.
- Completed the assigned task with on-time delivery of 90% with quality of 94%.

Snap Bizz cloud tech pvt ltd, Bengaluru (11/2020 – 07/2021)
Position: ML Intern (Python, Selenium)

- Developed web scraping scripts python selenium and Beautifull-Soup library, which replaced 210-man hours per week.
- Created dynamic price prediction ML model based on local vendors commodity pricing.
- Performed data cleaning and validation of scraped data which replaced 50hr man work for a weak.
- Prepared concise and understanding documents of my work for future reference.

Ace designers Ltd Bengaluru (07/2019 – 11/2020)
Position: Post graduate Intern (MATLAB, ANSYS)

- Carried out research on Machine tool components design, analysis and FE model updating methods.
- Developed Stiffness and mass matrix reduction scripts for model order reduction.
- Successfully carried out modal results comparison between FE model and experimental results using MAC method.
- Implemented FE model updating method for boring bar based on experimental results.

Check out my hobby projects in my online Portfolio: https://nityanandrh.github.io/Nitya-bio-2024/

Technical Skills

- **Programming languages:** Python, HTML, CSS, JavaScript
- **Other**: AWS, GitHub, Jira, Vue, Flask, BeautifullSoup, Sklearn, Keras, CV2, VTK, LangChine, Yolo, Powerpoint

Accomplishments

- Received **Spot award** for securing runner up in inter department Hackathon in P&W.
- Received **Outstanding Performance of the year 2022** award from division director IHI Japan.
- Received **ON-FLY** award for the first quarter in current organization at Quest Global.
- Published a **research paper** titled 'FE Model updating of boring bar and determination of chatter stability' in Material Today Proceedings (Science Direct).

Educational Details

- Master's Degree in Machine Design from BMS College of Engineering Bengaluru with CGPA 8.93
- Bachelor's Degree in Automobile Engineering from BVB College of Engineering Hubli, with CGPA 8.58

Declaration

I hereby declare that the above mentioned information and the qualities are correct and accurate to the best of my knowledge.

Place: Bengaluru (Nityanand RH)

Date: