Vignesh Prakash

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SUMMARY

Experienced Software Developer proficient in JavaScript and Python, highly skilled in designing visually stunning and user-friendly web interfaces. Also, a collaborative team player, possessing strong communication and problem-solving abilities, and committed to continuous learning and improvement.

TECHNICAL SKILLS

Languages JavaScript, Python, Typescript, Shell Scripting, SQL

Technologies NodeJS, React, MySQL, Tensorflow, NumPy, PyTorch, Git, LangChain, Cypress (TDD), Figma, OpenCV

PROFESSIONAL EXPERIENCE

Software Developer, Zoho Corporation — Chennai, India

May 2018 - Jul 2022

- Implemented a Code Editor Widget using Microsoft's Monaco Editor and deployed it in 20+ products across Zoho.
- Designed and developed a Drag & Drop website builder, empowering CRM users to create real-time templates with interactive workflows and customize different page views.
- Significantly improved stability of the code base by automating unit and end-to-end tests using Jasmine and Cypress, resulting in a reduction of release build testing time by 1-2 days.
- Facilitated auto-deployment of Node Packages during the release phase using Gitlab CI/CD Pipelines, resulting in a 5% reduction in delivery time and minimizing incompatibility issues.
- Demonstrated leadership skills by effectively leading a team of 4 developers, delegating tasks, and conducting code reviews to ensure adherence to best practices.

INTERNSHIP

Data Science Intern, AI Camp — Palo Alto, California

May 2023 - Present

- Built a Computer Vision Model to detect brain tumors from MRI images, resulting in an F1 score of 0.87 [Website]
- Implemented a similarity searcher of vector embeddings using FAISS to construct prompts for Zero Shot Learning
- Guided 5 students in developing handwritten character recognizer using Pytorch, achieving 84% accuracy [Link]

PROJECTS

Faculty Finder App using Generative AI & LLM: Webscraped contact details of over 100,000 staffs from 2000+ high schools across US, by using multiple prompt engineering techniques in Open AI GPT 3.5 turbo model at a cost of \$0.0003/contact & pushed the details Pinecone which acts as a datasource for a chatbot using LLM. [Website]

Constrained Editor Plugin for Monaco Editor: Developed Node plugin for a most requested features in Microsoft's Monaco Editor Portal (#953) by adding restrictions in editable area by manipulating text ranges asynchronously. This package is published with 150+ weekly downloads Try it here!

AWS DeepRacer using Proximal Policy Optimization: Created a highly effective reward function tailored to excel the time trial race on the Expedition Super Loop track, by following optimal racing line calculated using the menger curvature function, and model achieved an outstanding 100% completion rate during evaluation, with 0 off tracks.

Autonomous Firearm Detector using YoloV5 Model: Achieved 92% accuracy in firearm detection with a YOLOV5 model trained on 5000 CCTV images, while leveraging Google's ViTImageClassifier to classify gun handlers as police or public, enhancing public safety. Try it here!

OPEN-SOURCE CONTRIBUTIONS

Microsoft/monaco-html#15: Solved worker failure issue caused due to asynchronous timeouts in Microsoft/monaco-html Microsoft/vscode#123071: Updated title of the Key binding in shortcuts panel of Microsoft/vscode

CERTIFICATIONS

JavaScript Algorithms & Data Structures - freeCodeCamp SQL for Data Analysis Generative AI with Google Cloud

Hands-On PyTorch Machine Learning PyTorch Essential Training: Deep Learning Large Language Models with Google Cloud

EDUCATION

Master of Science in Robotics, University at Buffalo

<u>Course work</u>: Machine Learning, Reinforcement Learning, Computer Vision & Image Processing

Bachelor of Engineering in Mechanical, Sri Krishna College of Technology, Anna University Course work: Probability, Operations Research

Apr 2018 GPA: 3.87/4

GPA: 3.96/4

(Expected) Dec 2023