Pavan Shingadia

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SUMMARY:

Full stack developer skilled in both front-end and back-end technologies. Passionate about writing clean code, efficient APIs, and continuous learning. Collaborates effectively across teams and adapts quickly to evolving project needs.

TECHNICAL SKILLS:

- **Frontend -** JavaScript , React Js , Redux
- **Backend -** Node.js , Express.js , TypeScript
- **DevOps –** Docker (Learning), AWS(Learning)
- **DataBase -** mySql , MongoDB , PostgreSQL
- **Tools -** Git, Jupyter Notebook, Postman

EXPERIENCE:

FSM Internship – IIT Delhi(Collaboration) | June 2025 – July 2025

- Designed and developed an AI/ML-powered vision system to automatically measure geometric dimensions (length, width, diameter) of machined components using standard cameras.
- Used **Python, OpenCV, MediaPipe** for computer vision and **TensorFlow, PyTorch** with pre-trained models (YOLOv8, Detectron2) for object detection and measurement.
- implemented techniques for **angle and lighting invariance** via image augmentation, homography, and normalization.

PROJECTS:

[Link] **AI-Based Vision System for Geometric Dimension Measurement**

- Built a computer vision system using YOLOv8 to detect and measure geometric dimensions of machined parts with high accuracy.
- Integrated OpenCV and TensorFlow-based models with ThingWorx IIoT platform for real-time data transfer and visualization.
- Applied image augmentation, homography transformation, and lighting normalization for robust measurements.
- **Tools Used:** Python, MySQL, OpenCV, MediaPipe, TensorFlow, PyTorch, YOLOv8

[Link] **Ecommerce Website** – Front End and Back End Development

- Developed a responsive ecommerce platform with product catalog, search, filtering, cart, and checkout features.
- Created RESTful APIs using **Node.js & Express**, and used **MongoDB** for storing products and user data.
- Implemented **authentication and authorization** with Google OAuth, JWT, and session management.
- Integrated **Stripe** for secure online payment processing and order flow.
- **Tools Used:** React.js, Node.js, Express.js, Tailwind CSS, MongoDB, Google OAuth, Stripe, Cloudinary, TypeScript

EDUCATION:

KPGU University | B.Tech Computer Science & Engineering | Sep 2022 to May 2025

Vadodara, Gujarat

CGPA – 9.12