Manan Lad
Machine Learning Engineer & Python Developer

Email
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+91 9223900363

EDUCATION:

Mumbai University, **BE - Information Technology**, GPA 9.15

CORE SKILLS:

Python, Java, **Javascript**, C, C++, HTML, CSS, **pandas**, **pytorch**, **transformers**, **Django**, **Flask**, SQL, MongoDB, AWS, **Keras**, **Tensorflow**, ReactJs, **opencv**, REST, GCP, Bootstrap, GIT, NodeJs

EXPERIENCE:

Machine Learning Engineer & Python Developer
GetClarity Fintech Services, Mumbai / July 2022

- Developed & Maintained **microservice based backend architecture** for company operations, 3rd party integrations, **Job scheduling systems**, Partner integration systems, **Automation framework** for **notification and report generation system**. Designing automation pipelines for report generation, document handling, validations. Managing **LMS** for tech integrations.
- Developed and modeled **government document validation & extraction system** validating more than **14+ types of documents**, **document quality analysis** using combination of **object detectors**, **segmentation, OCR, NER, & classification models**. Document confidentiality standard using **Image masking model**. Django based microservices for machine learning and **unstructured data handling**. Generative AI (GPT4) based **credit modeling system** utilizing **12+ data sources** and **6+ data source types**. PDF Generation system from **4 File types**.

Machine Learning Engineer & Python Developer
Azyo, CA / Jun 2021 - Dec 2021

- Development of user **liveliness detection system** for preventing **presentation attacks** using **computer vision** and **Image processing techniques**, **E-KYC system** for **user authorization** and **authentication**, AI based Smart Proctoring system to track & classify user traits like rotation (yaw, pitch, roll), head, eye movements etc, smart **gesture detection models** for **posture/ gesture/ sign language detection** using **mediapipe**, **tensorflow and keras**. Developing distribution ready **embedded javascript framework** for **E-kyc and captcha** like AI functionality for remote use cases.
- R&D on **IRQA** based ML pipelines for **Graph based hierarchical modeling**, scoring matrix for **HTS (Harmonized Tariff Schedule) classification** of more than **600+ classes**. Designed & Development of data pipelines and model flow architecture for modular integrations.

Machine Learning Engineer & Data Analyst - Intern
NULL Innovation Private Limited, Mumbai,Maharashtra / Nov 2020 - Apr 2021

- Backend **Django development** and maintenance of **Google Analytics** based marketing product. **Creating and maintaining Chatbot API** using **NLP & Intent prediction** for customer support of company websites detecting **45+ intents**. Refactoring service code base to increase performance of API.
- **Data analytics pipeline** of Google Analytics data to calculate and generate recommendations, **visualizations and statistics** based on product policy efficiently.

PROJECTS:

- **Video Augmentation -** MaskRCNN, PatchMatch, Flask
- **Car Speed Detection -** Tensorflow, Keras, opencv, yolov4, Easy OCR, Blender.
- **Gesture controlled Media Player -** Tensorflow, keras, yolov3 tiny, VLC, Raspberry pie
- **Chatbot App for Django -** Tensorflow, keras, Django

CERTIFICATIONS:

- Deep Learning.AI Tensorflow Developer Specialization.
- Computer Vision - Object Detection with openCV and Python.
- Natural Language Processing in Python Sequence, Time Series, and Prediction.

PUBLICATIONS:

- [BlazePose and LSTM for Realtime Spinal Dysfunction Risk Estimation](#)
- [Vehicle Speed Detection Using Multi-Branch Networks From Temporal Image Pairs](#)