# Pratyush J.

# LEAD AI/ML & BACKEND ENGINEER

# **PROFILE SUMMARY**

I am an Engineer having 5+ years of professional experience in software development, with passion for learning and implementing diverse technologies. Have worked on multiple technologies like Python 3, Al/ML, SQL, ETL. Can also lead team and manage application infrastructure using services like AWS, GCP.

# **TECHNICAL SKILLS**

- Al: PyTorch, Scikit-learn, VertexAl, Transformers, Spacy, NLTK, OpenCV, OpenAl, LangChain, LangGraph, Pinecone
- Languages: Python 3, SQL.
- Framework: FastAPI, Flask, Pandas, Numpy, SQLAIchemy.
- Databases: MySQL, PostgreSQL, SQLite.
- DevOp Tools: Git, Gitlab CI/CD, Docker.
- ETL Tool: Talend Open Studio.
- · Cloud Platforms: AWS, GCP.
- Operating Systems: Ubuntu (Linux), Microsoft Windows, MacOS.

# **CAREER HIGHLIGHTS**

- Finetuned NLP and CV models.
- Developed Generative AI chatbots.
- Worked on ETL using Talend Open Studio.
- Implemented CI/CD pipelines.
- Designed server architecture.
- Lead and developed Fintech Saas which simplifies book-keeping from scratch.
- Experienced in whole cycle from requirement gathering, solution design, estimations, development till deployment to production.
- Implemented various services of GCP & AWS.

# **WORK EXPERIENCE**

# Lead AI/ML & Backend Engineer

## Pragmatyc (2019-Present)

- · Currently in a senior consultant role.
- Backend developer, AI/ML developer.
- Team lead, defining solution & server architecture.
- · Responsible for development and deployments.

# ACADEMIC BACKGROUND

#### Woolf

# Master of Science, 2025

 Pursuing studies in Computer Science, Machine Learning and Artificial Intelligence.

#### **CSVTU**

# Bachelor in Engineering, 2019

· Pursued studies in Mechanical Engineering.

#### **CBSE**

#### Higher Secondary Certificate, 2015

• Pursued studies in PCM + Computer Science.

#### **CGBSE**

# Secondary School Certificate, 2013

• Completed 10th grade.

# **PROJECTS WORKED ON**

#### **GPTW - HRTech, India**

- Great Place to Work (GPTW) is a global consulting firm that surveys employees to identify and recognize exceptional workplaces.
  They provide certification programs and consulting services to help companies create a positive and productive work environment.
- My job was to develop Generative AI Chatbot which gives answer to user for implementing best practices.
- API: Flask framework of Python 3

- Al: LangChain, Pinecone, OpenAl GPT
- Git: Gitlab

# **Xperio - GRMS, India**

• Role: Al

- Xperio is a global GRMS that enhances hotel guest experiences through smart automation powered by IoT and AI technologies.
  Xperio enables hotels to deliver personalized, efficient, and seamless services, elevating guest satisfaction and operational efficiency
- My job was to develop Generative AI Chatbot which gives answer to user for weather information, about hotel, small-talks, nearby places etc. And also developed a controller which communicates with IoT devices using protocols like KNX and BACnet.
- Role: Al

- Al: LangChain, LangGraph, Pinecone, OpenAl GPT
- Git: Gitlab

# Stolle Machinery - Can Manufacturing, USA

• API: FastAPI framework of Python 3

- Stolle Machinery provides high-speed, reliable machinery and equipment for the global food and beverage metal packaging industry, specializing in the production of two-piece cans and ends.
- My job involved leading the team, developing the data pipeline, performing feature engineering, and training models to predict machine failures.

• Role: Tech Lead - Al

• Al: Pandas, Scikit Learn, PyTorch

Database: ClickHouse, AWS

• Git: Gitlab

#### **Buktec - Fintech SaaS. India**

• Buktec is an Al-powered accounting automation platform that streamlines pre-accounting tasks for businesses and accountants. It digitizes manual processes, saves time, and ensures accurate financial records.

My job includes from leading team, solution definition, setup of project to development and deployment to server.

Role: Tech Lead - Backend & Al

• AutoML: Entity Extraction using Google's VertexAl

AutoML and tuning Gemini

• AI/ML: Entity Extraction by Finetuning LiLT Transformer

**Notification:** Firebase

• 3rd Party: AWS SES, Msg91, Razorpay, Finbit

• API: Flask framework of Python 3

• Database: MySQL

• ORM: SQLAlchemy

• ETL: Talend Open Studio

• CI/CD: Docker, Gitlab Runner

• Infrastructure: GCP - Load Balancer, Cloud SQL, Cloud

Run, Cloud Storage, Google Vision

# **DCDial - Customer Service, USA**

· DCDial is a cloud-based communication and payment platform designed for businesses. It offers features like automated dialing, call recording, and payment processing to streamline sales and customer service operations.

· My job was to develop and deploy Generative Al Voice Bot Agent for customer payment and support to the Dialer.

• Role: Al • OpenAl: GPT, Whisper, TTS

• Language: Python 3

• Others: Multiprocessing, Threading, Pinecone

• Noise Suppression: DeepFilterNet

• Agentic Framework: LangChain, LangGraph

• Git: Gitlab

Dialer: Asterisk

# SkliQ - Enterprise SaaS, USA

• SkliQ is a platform that helps organizations connect employees based on their skills. It's like an internal social network for sharing expertise, finding collaborators, and unlocking hidden talent within the company.

My job was to develop and deploy a Named Entity Recognition model for resumes.

· Role: Al • NLP: Spacy, NLTK

• API: Flask framework of Python 3 • Trained: AWS EC2

• Parser: PDFMiner, Pandoc • Deployed: AWS EC2

# **Kodak - Imaging Solutions, USA**

· Kodak is a company that specializes in imaging solutions, providing innovative technologies for capturing, processing, and printing images. It empowers individuals and businesses with tools for professional photography, printing, and digital imaging, helping them preserve memories and enhance creativity.

My job was to develop and deploy a clustering model for image grouping.

Role: Al • Deployed: AWS EC2

• API: Flask framework of Python 3

# ClideG - EHS, India

· CLIDE is a management consultancy firm specializing in safety solutions. They offer services like risk assessment, safety training, and data analytics to help businesses create safer work environments and reduce incidents.

My job was to develop and deploy a Object Detection model for helmets.

• Trained: AWS EC2 • Role: Al

• API: Flask framework of Python 3 • Deployed: AWS EC2

• Git: Gitlab • CV: Tensorflow, OpenCV

#### mStitute - EdTech, India

CV: OpenCV

• mStitute is an online learning platform specializing in engineering entrance exams like JEE Main and MHT-CET. They offer mock tests, practice papers, and video lectures to help students prepare effectively for these competitive examinations.

My job was to develop and deploy OMR reader, face recognition, and question bulk uploader.

• Role: Backend & Al • Parser: Pandoc

• API: Flask framework of Python 3 · Git: Gitlab

• Database: MongoDB Infrastructure: AWS