Address	**KAMAL RAJ M M**	Contact
Senior Python Developer | Artificial Intelligence SME | AI Research | Data Analytics		

OVERVIEW:

Innovative and detail oriented Senior Python Consultant eager to implement the in-depth knowledge in Data Analysis with Python, NLP libraries like Pytorch, Transformers, LLM Frameworks like Langchain, DSPy along with Cloud Deployments in AWS & GCP.

WHY HIRE ME:

With a proven track record in AI, Python and Linux, I'm equipped to deliver cutting-edge solutions that will drive your business forward. My expertise in core Python modules, NLP, and Gen AI framework, combined with my deep understanding of AI technologies and Linux systems, will position me as a valuable asset to your team.

SKILLS:

1) Programming Language: Python
2) Frameworks & Tools: Pytorch, Transformers, Langchain, Django & Streamlit
3) Data Analysis: data cleaning & statistical analysis with Pandas, NumPy, SKlearn
4) Relational DBs : Postgres & SQLite3
5) VCS : Git
6) Generative AI Technologies: Open Source & Paid LLMs(Llama3, OpenAI, Gemini, AWS Sagemaker)
7) AI-Techniques: Fine-Tuning and Instruction tuning with Custom Data using Pytorch, Transformers, TRL
8) Data Processing: Experience with data processing libraries like Pandas, NumPy
9) Administration on Linux: Phoenix AI Observability Server & Matrix Comm Server .
10) Vector Embedding & storing: Model Loading & deployment
11) Cloud Platforms: AWS EC2, Hugging Face Spaces, Streamlit
12) Operating System: Ubuntu Linux, Windows
13) Technical Writing: Familiar with Asciidoctor and markdown format

RESPONSIBILITIES:

1) Translate the business questions into a structured automation process starting with data collection, cleaning, conducting EDA and statistical analysis.
2) Implementing data pipelines with python & create dashboards for stakeholders
3) Providing actionable, detail oriented consultation for real world problems with Generative AI platforms like OpenAI, HuggingFace, Groq and AWS Sage maker.
4) Developing AI based solutions that target the Business problems, automation challenges and help in reducing cost, increase efficiency.
5) Write RAG pipelines from scratch in Python, that involve LLM framework like Langchain, vector store like faiss, weaviate and GenAI models API endpoints.
6) Develop Django Backend with RestAPI endpoints, by integrating with OpenAI, Groq and HuggingFace LLM API endpoints.
7) Research open source Bridges and Python SDKs to integration Gen AI model in to Matrix server, and create services

8) Research on Open Telemetry and Open Inference for Gen AI API endpoint, and administer Phoenix Server on Ubuntu 20.04 machines
9) Write technical write up explaining the problem at hand, and possible technical solutions, and the steps to achieve the results

PROJECTS WITH AI & PYTHON WITH LINUX:

1) GenAI Youtube Comment Automation Development: Aug 2022 - Mar 2023
   Overview: Develop Django Backend that integrates with Youtube API, Open AI API that extracts the recent comment made under the Youtube Videos, and provide the reply from the AI backed by the LLM.
   Tech: Langchain, Django, OpenAI SDK, Ngrok
   Outcome: Provided 3 comment recommendations for every Comment received in the youtube video, and increased the comment reply rate to 200 comments per hour.

2) Generative AI Ecosystem & Python Integration Training: Sep'23 ~ Present
   Overview: Trained three experienced python developers to transition into the field of Generative AI,
   Tech: Langchain, Pytorch, Transformers, HuggingFace, VectorDBs & Core Python
   Outcome: Successfully transition the 3 developers into GenAI work profiles in their current organization.

3) Upgrading and Testing the Gen AI ChatBot with RAG Pipeline: Sep2023~Nov2023
   Overview: Upgrade the CRUD Endpoints of the Django backend integrated with OpenAI with help of Langchain
   Tech: Langchain, Django, OpenAI SDK
   Outcome: Rewrote the CRUD endpoints that provides the reply to the end users, and successfully got it approved by the customer stakeholders

4) Integration DSPy & Phoenix Server on Ubuntu 20.04 for AI Observability: July2024~Aug2024
   Overview: Develop F1 metric score on DSPy framework & integrate Phoenix Server for tracing the OpenAI API calls. Reduced the debugging time of DSPy modules. Optimized the cost of API calls to OpenAI with the help of Phoenix Server
   Tech: Ubuntu, Dspy, OpenAI SDK, Phoenix Server
   Outcome: Developed the logic for F1 metric in DSPy framework. Researched the Phoenix and administered phoenix server with backend Postgres Database.

EXPERIENCE:

Senior Python Developer | AI Engineer | Self-employed | 2022 - Present | 2+ yrs
1) Innovative and detail oriented Generative AI Engineer eager to implement the in-depth knowledge in Large Language Models, NLP libraries like Pytorch, Transformers, LLM Frameworks like Langchain, DSPy along with Cloud Deployments in AWS & Google.
2) Experienced in providing Top class detail oriented consultation for real world problems with Generative AI platforms like OpenAI, HuggingFace, Groq and AWS Sagemaker.

3) Skilled at developing AI based solutions that solves the Business problems, automation challenges and help in reducing cost, increase efficiency.
4) Collaborate with a dynamic team of experts and contribute to the project's overarching goal of building AI systems that people can trust
5) Optimize and scale the AI models by profiling the performance and efficiency, and educating the internal teams.

EARLIER INDUSTRY EXPERIENCE: 14+ YRS

1) Org1 · Full-time | Manager | Mar 2014 - Nov 2022 | 8 yrs 9 mos
2) Sales Executive | Org2 | 2010 - 2014 | 4 yrs
3) Org3 - India | Thermal Engineer| 2008 - 2010 | 2 yrs

EDUCATION:

1) Completed BE Mechanical engineering from College affiliated with Anna University in 2007.
2) Achieved consistent department topper and graduated **with 87%.**
3) **Scored 90.5% in class XII** at Hr. Sec Matriculation School in 2003.
4) **Scored 77.2% in class X** at Matriculation School in 2001.