## 3. Associate Al Engineer

Field	Details	
Role	Associate Al Engineer	
	( <del>-</del>	
Nemakanaf	(Engagement initially on intern-basis)	
Number of Positions	05	
Qualifications	Minimum Requirement:	
Qualifications	Al Intern	Associate Al Engineer
	Last semester of Bachelor's or	Bachelor's or Masters degree in
	Masters degree in Science,	Science, Technology,
	Technology, Engineering, or	Engineering, or Business
	Business Administration or	Administration or relevant
	relevant quantitative field	quantitative field from a
	(economics, statistics etc) from	recognized university/institute
	a recognized	
	university/institute	
Experience		
	0 11 1	Associate Al Engineer
	internship in AI/ML undertaken in a company. An academic internship will not be considered.  • Demonstrated miniprojects using LLM APIs (chatbot, doc-QA, summariser) which are deployed in real-world.  • At least one link to working prototype of AI/ML/LLM app/tool built solo by applicant (proven	Internship for 4 months in NHAI, and based on the evaluation by the Selection Committee Preferrable Skills:  - Demonstrated mini-projects using LLM APIs (chatbot, doc-QA, summariser), preferably deployed in real-world and professional settings.  - Understanding of Promptengineering patterns (CoT, RCI,
	by sharing link to	3, Mistral 7B).
Field	Details	
	deployed tool that works on clicking).  Demonstrable projects with Python, Git, and REST fundamentals (proven by sharing Github repo)	- Basic eval with ragas / LLM-based graders; logging prompt-response pairs for audit Bonus: exposure to vector DBs (FAISS, Milvus) or simple CV tasks Classical AI/ML projects is a strong plus.

## Skill set

- Demonstrated mini-projects using LLM APIs (chatbot, doc-QA, summariser) preferably deployed in real-world and professional settings.
- Understanding of Prompt-engineering patterns (CoT, RCI, self-consistency)
- Quick RAG builds with LangChain / LlamaIndex and open-weight models (e.g., Llama 3, Mistral 7B).
- Basic eval with ragas / LLM-based graders; logging promptresponse pairs for audit.
- Bonus: exposure to vector DBs (FAISS, Milvus) or simple CV tasks.
- Classical AI/ML projects is a strong plus.

## Proposed Responsibilities

- Convert pain-points into working LLM demos and POCs.
- Curate reusable prompt & chain libraries for the Cell.
- Collaborate with AI experts and Full-Stack on scaling successful prototypes.
- Utilize Python to build robust, scalable data pipelines for ingesting diverse datasets relevant to Al modeling (e.g., FASTag, drone imagery, sensor data).
- Develop Python-based scripts for extensive data cleaning, preprocessing, transformation, and validation to ensure data is optimized for machine learning applications.
- Collaborate with the AI/PM specialist to perform feature engineering, using Python to create new data features from raw data to improve model performance.
- Automate AI workflows, including data extraction, preparation, and model-feeding processes, using Python-based tools and frameworks.
- Directly support the modeling process by providing clean, structured datasets and assisting in the initial stages of model development and validation.
- Manage and maintain the data environments required for Al development, ensuring data quality and accessibility.
- Liaise with NHAI stakeholders to understand and define data requirements specifically for planned AI-driven outcomes