

Position: Senior Al Engineer with Computer Vision Experience

Type: Full Time

Location: Fully Remote.

Salary Range: BDT up to 1,50,000/month (negotiable for exceptional candidates)

Company Information

Delineate is building an Al Co-Pilot for Computational Modeling in Drug Development. This project is a stealth startup out of MIT with two cofounders:

Emily Nieves Co-Founder CEO: https://www.linkedin.com/in/emily-nieves-a67b90144/

- MIT PhD: Biological Engineering, Computer Science
- 8+ Years Pharma Industry Experience (Pfizer, Astrazeneca)

Jawad Iqbal Co-Founder CTO https://www.linkedin.com/in/jawad-iqbal/

• 5+ years AI and Technical Project management in Aerospace Industry

Company Website: delineate.pro

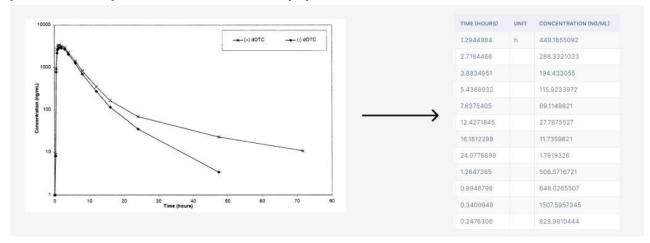
Company Youtube Channel Walkthrough of Delineate:

Position Overview:

We are seeking a senior AI engineer that has extensive experience with computer vision technologies and some experience in LLM based approaches.

The ideal candidate will have a great deal of interest in building cutting edge AI powered applications for the pharmaceutical industry.

The outcome of the role will be to assist in automated digitization (plot to datatable) of plots found in pharmaceutical research papers



This will involve:

- Training custom AI models on custom datasets developed internally at Delineate
- Apply classical computer vision techniques to extract certain data from plots
 - Example pharmaceutical paper with a plot
- Learn and rapidly apply latest transformer based capabilities
 - o <u>Example</u>
- Research multimodal LLM search use cases
- Work with large datasets and infrastructure services such as Azure
- Explore agent and multi-agent based implementation for complex processes.

We are looking for a part-time Senior AI engineer with computer vision experience to join our Bangladesh based development team. This job is fully remote. The salary for this position will be competitive with average wages for similar roles/experience in Bangladesh.

Job Requirements:

Education and Industry Experience

• Bachelor's in CS, Software Engineering, Information Technology, or a related field is preferred.

Computer Vision Proficiency

- Proficiency in deep learning frameworks like TensorFlow, PyTorch, or Keras
- Expertise in training and fine-tuning models for computer vision and natural language processing (NLP) tasks
- Experience with data preprocessing, augmentation, and handling imbalanced datasets
- Familiarity with transfer learning techniques and pre-trained models (e.g., ResNet, BERT, GPT)
- Knowledge of distributed training and optimization techniques for large-scale model training
- Strong background in computer vision algorithms and techniques (e.g., image processing, feature extraction, object detection, and segmentation)
- Experience with libraries like OpenCV, scikit-image, or Pillow
- Familiarity with techniques for plot extraction, axes recognition, and data extraction from scientific plots
- Ability to handle various plot formats (e.g., PNG, PDF) and preprocess data as needed

Al and Generative Al experience

- In-depth knowledge of multi-modal models that combine vision and language
- Familiarity with information retrieval and search techniques for multi-modal data
- Understanding of indexing and querying strategies for large-scale multi-modal data
- Ability to design and implement effective search systems for multi-modal LLM applications
- Familiarity with LLM tooling:
 - OpenAl GPT4
 - Retrieval Augmented Generation
 - HuggingFace
 - Langchain
 - o Fine-tuning open source commercially available LLMS (llama2, ect)
 - Agent frameworks
 - Autogen
 - LangGraph
 - Prompt engineering
 - Vector databases

Full Stack Familiarity

- Proficient in developing Backend APIs that seamlessly integrate with modern front end techstacks
 - o FastAPI, Flask, Django
- Moderate experience in full stack development
 - Angular, React, NodeJS
- Experience in implementing continuous integration/continuous deployment (CI/CD) pipelines for AI applications.

Soft-Skills

- Excellent problem-solving skills and the ability to work collaboratively in a team environment.
- Ability to convey complex technical concepts to both technical and non-technical stakeholders.
- Excellent in Spoken and Written English.