## **About the job**

Job Description Summary  
  
We are seeking an experienced and innovative Machine Learning Engineer to join our cutting-edge artificial intelligence team. The ideal candidate will be passionate about harnessing the transformative power of artificial intelligence to revolutionize diverse facets of the pharmaceutical industry, including drug discovery and development, clinical trial processes, and commercialization. Your contributions will play a key role in accelerating our mission to bring life-saving treatments to market more efficiently.  
  
The Machine Learning Engineer will be responsible for designing, implementing, and maintaining all components and layers of custom AI solutions, including databases, data processing, model development, testing, and front ends, where applicable. The focus of this role is to deliver autonomous solutions that accelerate business initiatives and productivity, while ensuring that the solution is maintainable and built-to-last.  
  
The Machine Learning Engineer ensures adherence to all relevant regulatory requirements and Company Standard Operating Procedures (SOPs) as appropriate.  
  
Job Description  
  
ESSENTIAL FUNCTIONS

* Design, develop, and maintain machine learning models and algorithms to support company initiatives like enhancing business intelligence, drug development, and automation.
* Collaborate with interdisciplinary teams, including scientists, researchers, and engineers, to understand domain-specific challenges and integrate AI solutions effectively.
* Develop robust, scalable software for AI/ML applications in a regulated environment.
* Keep abreast of the latest AI/ML techniques and advancements.
* Ensure compliance with data privacy and security regulations.
* Participate in code reviews and maintain high standards for code quality and documentation.

Knowledge/Skills/Abilities Required

* 2+ years of experience in building end-to-end software solutions with hands-on exposure to all aspects of software and data engineering; including databases, data ingestion/processing, model development, and testing.
* Deep understanding of Python including aspects related to object-oriented programming and best practices / style guides for Python (PEP-8). Experience with PySpark is a plus.
* Experience with prompt engineering and the use of Large Language Models as a part of cohesive workflows (chain-of-thought, few-shot-prompting, etc.).
* Experience with common python prompting frameworks and techniques (langchain, sentence transformers, RAG, etc.)
* Experience with advanced string processing and vectorization algorithms, tools, and techniques (HNSW, semantic reranking, similarity heuristics)
* Experience working with statistics and large datasets is a plus.
* Experience with combining multiple frameworks and RESTful APIs is a plus.
* Excellent problem-solving, communication, and collaboration skills.
* Ability to translate complex technical concepts to non-technical stakeholders.
* Experience with version control systems such as Git.
* Ability to elicit and iterate over requirements with business partners, and to communicate technical concepts to non-technical audiences effectively.
* Analytical thinker with excellent critical thinking, problem-solving, and troubleshooting skills as well as the ability to adapt to changing priorities and deadlines.
* Excellent planning, organization, and time management skills including the ability to support and prioritize multiple projects.
* Minimum level of education and years of relevant work experience.
* Master’s Degree in Computer Science or related field, with a focus on AI & machine learning.
* Minimum of 2 years work experience in a role focused on developing AI / software solutions.

Preferred

* Experience with Microsoft Azure and/or developing solutions for the biotech industry.
* Travel requirements
* 0-10%
* Hybrid Position

EEO Statement

PTC Therapeutics is an equal opportunity employer. We welcome applications from all individuals, regardless of race, color, national origin, gender, age, physical characteristics, social origin, disability, religion, family status, pregnancy, sexual orientation, gender identity, gender expression, disability, veteran status or any unlawful criterion under applicable law. We are committed to treating all applicants fairly and avoiding discrimination.