**Applied Scientist**

Job ID: 2871327 | Amazon.com Services LLC

DESCRIPTION

At Amazon's Selection Monitoring team, we leverage advanced AI technologies, including the latest Large Language Models (LLMs) and Generative AI (GenAI), to enrich and expand Amazon's product selection in alignment with consumers’ interests. Our mission is to establish the world's most comprehensive, accurate, and up-to-date universal product catalog, setting new standards in product discovery and coverage.  
  
We're seeking innovative Applied Scientists passionate about leveraging advanced AI to tackle complex challenges in product intelligence, data integration, and knowledge discovery. In this role, you'll collaborate with teams across Amazon to drive customer-focused solutions and amplify the impact of your work on our global customer base.  
  
  
  
Key job responsibilities  
- Design and implement advanced AI models using the latest LLM and GenAI technologies to enhance product understanding, matching, and categorization at an unprecedented scale.  
  
- Develop novel approaches to extract, generate, and validate product attributes and relationships using multimodal AI, combining text, image, and structured data analysis.  
  
- Create intelligent systems that can automatically generate high-quality product descriptions, features, and specifications using GenAI techniques.  
  
- Implement advanced natural language processing and computer vision models to extract insights from diverse data sources, including web content, user-generated data, and product imagery.  
  
- Develop innovative solutions for entity resolution, knowledge graph construction, and semantic reasoning to build a comprehensive understanding of the global product landscape.  
  
- Collaborate with cross-functional teams to integrate AI-driven insights into Amazon's product selection strategies and decision-making processes.  
  
- Lead the design and implementation of scalable, production-ready AI systems that can process billions of products efficiently on Amazon Web Services (AWS).  
  
- Stay at the advance of AI research, continuously exploring and implementing new techniques in LLMs, GenAI, and multimodal learning to drive innovation in product intelligence.  
  
- Contribute to the scientific community through publications, presentations, and collaborations with academic institutions.

BASIC QUALIFICATIONS

- PhD, or Master's degree and 4+ years of CS, CE, ML or related field experience  
- Experience programming in Java, C++, Python or related language  
- Experience in any of the following areas: algorithms and data structures, parsing, numerical optimization, data mining, parallel and distributed computing, high-performance computing

PREFERRED QUALIFICATIONS

- Experience using Unix/Linux  
- Experience in professional software development