

Position: AI Engineer (Deep Learning & DRL Specialist)

Location: Onsite - Multi Gardens B-17, Islamabad

About Us:

EcoEdge AI is a leader in sustainability, utilizing advanced AI and machine learning to optimize HVAC systems, reduce energy consumption, and lower carbon emissions. Our technology integrates seamlessly with existing building automation systems, making it easy to deploy and driving energy efficiency across various types of buildings.

Opportunity:

We are looking for a highly skilled AI Engineer with expertise in Deep Learning (DL) and a strong understanding of Deep Reinforcement Learning (DRL). The ideal candidate will have hands-on experience in designing, training, and deploying deep learning models for time-series data applications. Additionally, they should be proficient in model API development, cloud-based deployment (AWS), and have a strong foundation in Python and software engineering principles.

Responsibilities:

- Design, develop, and optimize deep learning models for time-series data applications.
- Implement, train, and fine-tune deep reinforcement learning algorithms (e.g., PPO, DDPG, SAC) for control and optimization tasks.
- Develop scalable APIs for deploying AI models and integrating them with cloud-based infrastructures.
- Work with AWS cloud services for training, deployment, and monitoring of AI models.
- Optimize model inference performance and handle large-scale data processing pipelines.
- Ensure robustness, reliability, and efficiency of AI models through continuous monitoring and retraining strategies.
- Collaborate with cross-functional teams, including data engineers, software engineers, and domain experts, to solve real-world problems.
- Conduct research and stay up-to-date with the latest advancements in deep learning and reinforcement learning.

Requirements

- **Education:** Bachelor's degree in Computer Science, Engineering, or a related field.
- **Experience:** 2+ years of hands-on experience as an AI engineer or related engineering role.
- **Technical Skills:**
 - **Deep Learning Expertise:** Extensive experience with LSTMs and Transformers for solving time-series data problems.

- **Reinforcement Learning Knowledge:** Hands-on experience with DRL frameworks like Stable-Baselines3, Gymnasium, or custom implementations.
- **Programming:** Strong proficiency in Python, PyTorch, TensorFlow, and deep learning libraries.
- **Model APIs:** Experience in developing and deploying model inference APIs using FastAPI.
- **Model Lifecycle Management:** Familiarity with deep learning model checkpointing, versioning, and drift detection.
- **Problem-Solving Skills:** Ability to work with large-scale, real-world time-series data, optimize deep learning models, and implement innovative AI-driven solutions.

Nice to Have

- Familiarity with cloud platforms (AWS) for model deployment and monitoring.
- Basic knowledge of CI/CD pipelines in a machine learning context.