Job Opening

Physical AI Engineering & Strategy, Senior Consultant
Currently an open bill rate range. The team does not want to limit the search based on max bill rate at this time.

Specifically, we are seeking an AI specialist with expertise in programming robot dogs and humanoids from the Chinese manufacturer, Unitree, and proficiency with NVIDIA Omniverse. Merely having experience with robots will not be sufficient for this role.
The team is in the process of establishing various AI labs, located in Alpharetta. This position is intended to be a permanent role, and we are looking for a long-term commitment.

Our Artificial Intelligence and Data team is at the forefront of integrating cutting-edge technology with physical systems. As a Senior Consultant in Physical AI, you will collaborate closely with clients and interdisciplinary teams to develop innovative solutions that leverage the power of robotics, software, and open-source technologies. This role offers a unique opportunity to engage in continuous learning and research, driving advancements in how businesses utilize AI across various industries. You will be instrumental in shaping the future of Physical AI, with the chance to influence new methodologies and technologies that address complex challenges.

Key Responsibilities

• Developing and implementing scalable demos that highlight the integration of software and hardware in Physical AI applications.
• Showcase innovations and speak at events, including innovation summits & technology showcases.
• Conduct analytics and monitor market trends to inform solution development, identify emerging opportunities, and position the team's capabilities strategically within the evolving Physical AI landscape.
• Utilizing strong knowledge of the NVIDIA ecosystem to design and execute solutions that meet stakeholder needs.
• Leading development in robotics, focusing on kinetics, perception, and decision making to enhance operational efficiency and safety.
• Collaborating with a variety of stakeholders to understand requirements and provide technical leadership throughout the project lifecycle.

To Qualify for the Role, You Must Have
• A Bachelor's degree in a relevant field (e.g., Robotics, Computer Science, Mechanical Engineering, Electrical Engineering).
• 2 plus years of full-time working experience in Robotics, Digital Twin, and Computer Vision/Deep Learning/Reinforcement Learning.
• Proven experience in developing and implementing scalable AI systems that integrate software and hardware components effectively.
• Strong proficiency in programming languages such as Python, C++, or Java, with hands-on experience in robotics frameworks (e.g., ROS) and simulation environments (e.g., Isaac Sim).

• Extensive knowledge of the NVIDIA ecosystem, including experience with their offerings and implementation strategies for robotics and AI applications.
• Solid understanding of robotic systems, including kinematics, dynamics, control algorithms, and sensor integration (e.g., LIDAR, cameras).
• Familiarity with machine learning techniques and algorithms, particularly in the context of robotics, automation, and decision-making processes.
• Experience designing, building, and maintaining robotics systems and digital twin models, with a focus on real-time data integration and simulation.
• Proficiency in using data manipulation and analysis tools (e.g., Pandas, NumPy) to derive insights from sensor data and simulations, along with experience in popular ML frameworks such as TensorFlow or PyTorch.
• Experience with DevOps tools (e.g., GIT, Azure DevOps) and Agile methodologies (e.g., Jira) to develop and deploy analytical solutions with multiple features, pipelines, and releases.

Ideally, You'll Also Have
• An advanced degree (Master's or Ph.D.) in Robotics, Computer Science, Mechanical/Aerospace Engineering, Electrical Engineering, or a related quantitative field; graduate school years can substitute for some industry experience.
• Previous experience in research projects related to robotics, automation, or digital twin technologies, including contributions to academic journals or conferences that showcase research findings and technical expertise.
• Proficiency in computer vision techniques and libraries (e.g., OpenCV) for object detection, tracking, and recognition, with practical applications in robotics.
• Experience in designing and implementing control systems for robotic applications, including PID controllers, state-space control, and adaptive control techniques.
• Ability to develop and optimize algorithms for tasks such as path planning, motion planning, and decision-making in robotics, enhancing system performance and efficiency.
• Familiarity with Hardware-in-the-loop (HIL) testing techniques to validate the performance of robotic systems in real-time by integrating hardware components with simulation models.
• Strong understanding of and/or interest in Agentic AI and Generative AI, with the ability to explore and implement innovative applications in these areas.
• Experience with Cosmos or similar data management platforms to facilitate the integration and analysis of large datasets in AI applications.

If you are interested in the position, please contact Tony Shen by email at tshen@datacommlab.com or by phone at 713-444-1025

Data Communications Lab, your AI and Cloud services partner.