Staff Applied Scientist - AI & Robotics
Currently an open bill rate range. The team does not want to limit the search based on max bill rate at this time.

Candidates will need to work on-site 5 days per week in Mountain View, CA.

Number of openings up to 4

Our AI Research team is building end-to-end robot policies that enable dexterous manipulation in real-world

environments. We are advancing embodied AI by integrating multimodal perception, robot learning architectures, and physical execution systems (Staff Applied Scientist - AI & Robotics). We aim to solve manipulation, autonomy, and simulation challenges at industrial scale. As a **Staff Applied Scientist**, you will lead the development of core components of these embodied systems—from model design and training pipelines to integration with perception, motion control, and hardware. You will design, prototype, and deploy robot learning models that span perception, policy learning, simulation, and real-world execution, collaborating closely with robotics engineers, AI infrastructure teams, and production experts.

What You'll Do

• Design and implement advanced robot learning architectures (e.g., diffusion policies, ACT, VLM/VLA-guided agents, imitation learning) to support dexterous manipulation, path planning, and autonomous task sequencing.

• Develop end-to-end policy training pipelines, integrating multi-modal sensory data (RGB, depth, proprioception, force/torque, LiDAR, tactile inputs) with control outputs.

• Build policy inference and closed-loop control that connect perception, planning, and execution on physical robotic platforms.

• Apply and extend large-scale architectures—LLMs, VLM/VLAs, diffusion models—to embodied tasks, grounding, and sim-to-real adaptation.

• Collaborate with cross-functional teams to deploy robot policies on hardware, ensuring robustness, repeatability, and safety.

• Lead data strategy for demonstrations, teleoperation, simulation pipelines, and evaluation frameworks for manipulation policies.

• Stay current with embodied AI research and share insights internally through discussion, mentorship, and technical presentations.

Required Qualifications

• PhD in a relevant STEM field, or Master's with equivalent industry experience in robotics, robot learning, or embodied AI.

• Proven experience building and deploying machine learning models on robotic systems—including training, evaluation, and real-world execution or simulation.

• Deep understanding of modern AI architectures (e.g., Transformers, diffusion models, VLM/VLAs, CNNs) with strong experience training models at scale.

• Strong PyTorch implementation skills, including authoring custom modules, batching, debugging, and performance optimization.

• Practical experience with ROS/ROS2 and integrating learned policies into manipulation or motion control workflows.

• Demonstrated impact via robot learning publications, open-source contributions, or production robotics deployments.

Preferred Qualifications

• Experience developing robot learning systems for dexterous manipulation, multi-step task execution, or autonomous behaviors.

• Expertise in robotics perception, including 3D understanding, force sensing, tactile feedback, multimodal fusion, or affordance modeling.

• Familiarity with Isaac Sim, Mujoco, Gazebo, PyBullet, or custom simulators, and demonstrated ability to transfer policies to hardware.

• Experience adapting foundation models (VLM/VLAs, diffusion, instruction-following agents) for embodied control tasks.

• Track record of production-ready robotics systems, reproducible research artifacts, or deployments in physical environments.

Please email you CV tshen@datacommlab.com for consideration

Thank you

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