JAMES AKL   james-akl@outlook.com · linkedin.com/in/james-akl · jamesakl.com

Expertise in **robotics**, **AI**, and **autonomous systems**. Experienced in **R&D** and **project leadership**.
Skilled in **software**, **mathematics**, **algorithms**, **system design**, **engineering**, and **testing**.

EXPERIENCE

Robotics and AI Institute

Research Scientist / Roboticist (2024/10 – Present) · Cambridge, MA
R&D in robotics, computer vision, deep learning, and mobile manipulation.
Design/implement more general algorithms/models in a robotics development team.
Own/oversee software within team (infrastructure, on-robot development, testing, integration, …).

Amazon Robotics · Innovation Lab

Postdoctoral Scientist / Project Lead (2024/03 – 2024/10) · Westborough, MA
R&D in robotics, deep learning, perception, control, manipulation, and human–robot interfacing.
Lead a prototyping team and develop robotic fulfillment systems, showcased in live demos.
Oversee software/system repeatability and maintainability to keep prototypes fit for handoff.
Develop core infrastructure, mentor juniors, and run evaluations (tactile sensors, robot hands, …).

Applied Scientist (2023/08 – 2024/03) · Westborough, MA
R&D in robotics, 3D perception, machine learning, task and motion planning, and control.
Develop perception algorithms/models and manipulation skills for autonomous logistics.

For publications/patents see LinkedIn or Google Scholar.

EDUCATION

PhD in Robotics Engineering · Worcester Polytechnic Institute · 2023
Emphasis in perception, control, planning, learning, manipulation, and autonomous robots.
Participate as Research Mentor in NSF REM and as R&D Trainee in FORW-RD NRT programs.

SKILLS

Software	Python · C++ · Bash · Docker · CMake · Git · uv · Conda · JS · Rerun · Graphite
Ecosystems	Linux · ROS2 · CUDA · HuggingFace · OpenAI · Omniverse · GCP · AWS · WebRTC
Libraries	PyTorch · Open3D · OpenCV · Eigen · PCL · SciPy · scikit-learn · pytest · ViSP
Robots	BD Spot · Franka FR3 · UR arms · Schunk SVH · Seed RH8D · Robotiq grippers
Platforms	Jetson AGX · RealSense · OptiTrack · SenseGlove · Dynamixel · ZED · Leopard

SERVICE

Reviewer (2021/06 – Present)
Review research for journals (IJRR, RA-L, T-ASE, TMECH) and conferences (ICRA, IROS, CDC, ISRR, Humanoids, CASE, SSRR) in robotics, AI/ML, control, automation, and mechatronics.

Updated: September 2025