

Abhishek Venkataraman

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Summary

Engineering leader with 10+ years building and deploying robotics, autonomy, computer vision, and applied AI systems. Currently leading a 15-person perception org across CV research, data/training infra, MLOps, evaluation, and production deployment. Proven track record scaling teams, shipping customer-facing deep-tech products, and translating technical strategy into business impact.

Experience

Voxel AI

San Francisco, California

DIRECTOR, PERCEPTION

Apr 2024 - Present

- Lead an org of 15 (ICs and managers) spanning CV research, training/data infra, MLOps, eval, and deployment; hired 6 Principal/Staff/Senior ICs
- Owned perception strategy and multi-year roadmap in partnership with PM and TPM; stood up outcome-focused squads and established hiring and leveling guidelines across engineering
- Partnered with CEO to raise \$44M Series B; engaged Fortune 500 customers directly to support new business and account expansion
- Launched customer-facing capabilities including anonymization, data summarization, real-time SMS detection alerts, and thermal use cases; partnered with Sales and Customer Success to grow new and existing accounts
- Led multi-quarter technical transformation to modern VLM-based perception systems from object detection and heuristics
- Introduced eval-driven development and rebuilt data collection workflows, reducing labeling backlog from 6 months to 1 week and enabling auto-review systems that cut false positives by 80%
- Scaled deployment footprint - 10x in cameras (250 → 2,500) and 5x in customer sites (25 → 125) while shipping new features

Proxy Robotics

Stanford, California

CO-FOUNDER

Dec 2025 - May 2026

- Built full-stack multi-robot low-latency teleoperation platform (Kinova G3, Franka Emika, Hello Robot Stretch, AgileX Piper, Lite6); supports VR (Quest 3), haptic (Force Dynamics Omega), and joystick input, plus stereo and wrist cameras. Live demo: demo.proxyrobotics.ai
- Implemented multi-robot monitoring, remote interventions, data logging, and search & retrieval; trained operators on simulated robots (MuJoCo) before customer deployments. Incorporated RBAC, admin controls, and security to make the platform real-world ready
- Demonstrated live cross-continental teleoperation between Stanford Robotics Center and Bengaluru for a customer
- Closed 4 design partners (3PL, construction, specialized manipulation) in 10 weeks, including a \$250k LOI for pilot deployment

Nuro

Mountain View, California

TECHNICAL LEAD & MANAGER, BEHAVIOR EVALUATION

Feb 2022 - Feb 2024

- Technical Lead for Behavior Core Eval, the main eval solution used by 40+ Engineers. Led a cross functional team of 10 developers & designers, including 4 direct reports
- Worked closely with Senior Leadership including Heads of Behavior, Software to measure weekly behavior improvement on several ODDs
- Drove ML adoption in behavior planning through Behavior Core Eval, improving stack performance 36%; highlighted by CEO in investor updates
- Led product vision and multi-year roadmap through Behavior Evaluation Vision workshop, synthesizing requirements across Simulation, Perception, TPM, and Product to ship a unified solution
- Increased team throughput over 50% by identifying and automating time-consuming manual workflows using Buildkite and Retool

May Mobility

Ann Arbor, Michigan

SENIOR ROBOTICS ENGINEER, PERCEPTION

Jun 2018 - Jan 2022

- Architected and deployed a scalable pipeline in AWS/Databricks to ingest field data and calculate metrics to measure autonomy performance
- Architecture lead for Vulnerable Road User (VRU) interaction; designed end-to-end pipeline from classification to vehicle behavior, team of 3
- Developed end-to-end semantic classification pipeline (image acquisition, sensor fusion, temporal tracking) and optimized policy rollouts for multi-policy decision-making, achieving 3X speedup in behavior prediction
- Scaled the autonomy stack across multiple platforms (Lexus, Sienna) and 9 sites across the US and Japan, generating \$1M+ in ride revenue
- Product lead for vehicle-camera traffic light classification; mentored 10+ engineers across Autonomy and AutoOps and built the new-hire onboarding process

Education

University of Michigan

Ann Arbor, Michigan

MASTER'S IN ROBOTICS

2016 - 2018

Indian Institute of Technology Madras

Chennai, India

B.TECH IN MECHANICAL ENGINEERING

2007 - 2012

Skills

Technical	Perception, segmentation, tracking, sensor fusion, behavior evaluation, simulation, multi-policy planning, autonomy; Models - YOLO, SAM3, VLMs, VJEPa, ResNet, VideoMAE; Frameworks - Tensorflow, Pytorch, OpenCV, ROS
Languages	C++, Python, Go, C, SQL, Typescript, Javascript, HTML/CSS
Infrastructure	AWS, BigQuery, Databricks, Docker, Kubernetes, Ray, ClearML, Grafana, Bazel, Retool