Adam Setapen

San Francisco, CA | asetapen@gmail.com | 415.805.6084
adamsetapen.com | github.com/asetapen | linkedin.com/in/adamsetapen

Computer scientist and roboticist with 12+ years designing and delivering advanced robotic systems across consumer, industrial, and surgical domains. Known for building high-performing teams, architecting scalable systems, and shipping mission-critical software from prototype to production. Deeply technical and hands-on, with a relentless passion for automation, ROS2, and expressive machines. Shipped multiple consumer robots, one industrial robot, and one surgical robot.

Technical Skills

- **Software & Tools:** Python, C, C++, ROS2, Rust, Linux, docker, git, systemd, GitHub Actions, Basic AWS and GCP, numpy, OpenCV, OpenGL, CUDA, cuDNN
- **Systems & Infrastructure:** Behavioral architectures, real-time motor control, motion planning, WebRTC, state machines, behavior trees, CI/CD pipelines
- **Leadership & Process:** Team leadership, hiring, mentoring, product ownership, agile workflows, cross-functional coordination
- **Hardware Design, Prototyping and Fabrication:** Sensor integration, basic proficiency in SolidWorks, OnShape, basic PCB prototyping, CNC, laser cutting, FDM/SLA 3D printing, animatronics, iOS/Android integration, mold-making, sewing

Experience

Amazon Frontier AI & Robotics

Software Development Engineer - Robotics, Amazon Frontier AI & Robotics

San Francisco, CA | Feb 2026 - Present

- Building robots for high-level reasoning and understanding combined with low level dexterity and mobility

Remedy Robotics

Head of Software | Staff Robotics Engineer

San Francisco, CA | Dec 2022 - Feb 2026

- Software lead for an endovascular surgical robot enabling remote neurointervention
- Control of robotic telescoping catheter with visual fiducials for orientation inference, used to treat aneurysm and stroke or for diagnostics through angiograms
- Built and led a team of 4 engineers developing robust, safety-critical software from ground-up
- Owned core software systems: ROS2, shared org-wide python frameworks, motor control, catheter dynamics, UI, and real-time video streaming via WebRTC
- Prototyped reliable, maintainable hardware devices for real-time ML and inference
- Directed technical operations during the first-in-human robotic Digital Subtraction Angiography clinical trials
- Established software best practices, led code reviews and planning for a safety-critical product team

Canvas Construction

Senior Staff Robotics Engineer | Staff Robotics Engineer | Senior Robotics Engineer

San Francisco, CA | Aug 2019 - Dec 2022

- Technical lead for the Behavior, Algorithms & Manipulation team (5 engineers) on an autonomous drywall finishing robot
- Architected core system components: planning, computer vision, manipulation, SLAM, and HMI (robot lights/sounds)
- Converted 20K-line procedural control file into modular, testable state machine
- Managed production + development releases, CI/CD pipelines, and weekly integration testing
- Led junior engineers, ran trainings, and helped scale the team during growth phase
- HMI design (robot sounds and lights), from drivers to UX

Primed Technologies

Senior Robotics Engineer

San Francisco, CA | May 2018 - August 2019

- Developed a robotic animatronic toy with speech recognition, NLP, and text-to-speech synthesis
- Architect and implement the entire robot software stack (python, ATMega, motor control)
- Rapid prototyping of voice-enabled robotic characters at early-stage startup (CAD, Fabrication)

Mayfield Robotics
Senior Robotics Engineer
San Francisco, CA | Oct 2016 - May 2018
- Developed core autonomous behaviors for Kuri, a home robot for photography and presence
- Led architecture of real-time computer vision pipeline and wake-word localization systems
- Robotic dancing algorithms with real-time beat detection blended with traditional animations
- Coordinated development with external contractors (animation, design) and internal firmware teams

AltSchool (now Altitude Learning)
Lead Hardware Engineer
San Francisco, CA | Oct 2015 - July 2016
- Prototyped and maintained classroom IoT devices, wearables, and smart surfaces
- Managed hardware deployment and maintenance across pilot schools
- Python ingestion of ~120 concurrent 1080P streams

3D Robotics
Roboticist
Berkeley, CA | Sep 2014 - Oct 2015
- Led development of scene-awareness and tracking systems for consumer drone platforms
- Optimized visual tracking pipelines for iOS and embedded systems
- Behavioral implementation of the first autonomous drone selfie
- Implemented OTA firmware updates for remote control, gimbal, and drone firmware
- Embedded systems integration, development of test software for use in manufacturing and production

Romotive (now Zipline)
Roboticist
San Francisco, CA | Oct 2012 - Mar 2014
- Lead engineer on ML and Human-Robot Interaction for smartphone-based home robot
- Built GPU-accelerated OpenCV vision pipeline for facial detection and recognition, basic visual attention, and early offline classification algorithms
- Combination of embedded computing (robotic base) and iOS (animatronic face)
- MFi certification and firmware integration

Formlabs
Software Engineer
Somerville, MA | Jan 2012 - Sept 2012
- Front-end (QT) for of the first Form1 software used for model slicing and generating toolpaths
- Designed and hosted the company's first website

Education

Massachusetts Institute of Technology (MIT)
M.S., Robotics - MIT Media Lab, Personal Robots Group
Thesis: "Creating Robotic Characters for Long-Term Interaction"
Advisor: Cynthia Breazeal
Highlights: Built and programmed DragonBot (the first robot to use a phone as its primary computer), securing a $10M NSF grant for socially assistive robots, published 3 academic papers

University of Texas at Austin
M.S., Computer Science (AI) | B.S., Computer Science (Turing Scholars Honors Program)
Thesis: "Exploiting Human Motor Skills for Training Bipedal Robots"
Advisor: Peter Stone
Highlights: Published 5 academic papers

Teaching
- Introductory Robotics Course, Ages K - 2 @ AltSchool
- Line-following robots Course, Ages 2 - 5 @ AltSchool
- Fab Lab Essentials @ Haystack Mountain School of Crafts
- How to Make (almost) Anything, TA @ MIT