

Aaron Cohen

MANAGER, SOFTWARE SYSTEMS AT NVIDIA

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Systems operator and technical leader whose work spans spacecraft, autonomous-vehicle testing and simulation, production vehicle systems, generative AI for engineering, and emergency communications.

Current work

NVIDIA - Manager, Software Systems

DECEMBER 2022-PRESENT / SANTA CLARA, CALIFORNIA

Manage generative AI and product systems-engineering work for complex engineering systems.

- Lead a generative AI software team focused on agents, multi-agent systems, RAG, graph-based reasoning, and critique-driven iteration.
- Primary inventor on patent-pending work applying agentic workflows to system requirements and testing.
- Built and managed product systems-engineering work across nine Level 2 vehicle feature areas.
- Managed more than ten engineers across the United States, China, and Poland.
- Supported Mercedes-Benz, Lucid, and Jaguar Land Rover customer functions.

NVIDIA - Senior Software Systems Engineer

AUGUST 2021-DECEMBER 2022 / SANTA CLARA, CALIFORNIA

Document-based and model-based systems engineering, including ASPICE and ISO 26262 contexts.

Autonomous vehicles

Lyft - Staff Quality Engineer

FEBRUARY 2020-AUGUST 2021 / PALO ALTO, CALIFORNIA

Developed verification and validation approaches for autonomous-vehicle software and supported the transition of the Level 5 organization during its acquisition by Toyota.

Cruise - Senior Systems Test Engineer

JUNE 2018-JANUARY 2020 / SAN FRANCISCO, CALIFORNIA

Helped build perception-testing, simulation, and automatic test-generation systems.

- Core developer automating recorded road events into perception log-replay and end-to-end simulations.
- Built a Flask API for scenario-driven test generation using Docker, Google Kubernetes Engine, and CircleCI.
- Tested computer vision, RADAR and LiDAR segmentation, sensor fusion, and prediction systems.

Flight systems

NASA Ames Research Center - internship and contractor assignments

SEPTEMBER 2010-JUNE 2018 / MOFFETT FIELD, CALIFORNIA

Nearly eight years across spacecraft systems engineering, electrical and test engineering, mission operations, launch integration, UAV radio links, and UTM systems engineering.

- Project manager for TechEdSat; developed flight software and supported ISS payload safety review.
- First author of the TechEdSat mission paper documenting its rapid path to orbit and ISS deployment.
- Electrical and test engineer for EcAMSat and co-author of technical and research publications.
- Named inventor on U.S. Patent 10,669,045, Affordable Vehicle Avionics System.

Public service

Menlo Park Fire Protection District / CA-TF3 - Communications Specialist

JANUARY 2017-PRESENT / MENLO PARK, CALIFORNIA

Deploy to disaster zones to establish emergency communications infrastructure in support of Urban Search and Rescue missions. Listed deployments include Hurricane Olivia (2018) and the North Complex Fire (2020).

Education

San Jose State University

B.S. AEROSPACE ENGINEERING, 2007-2012 / M.S. AEROSPACE ENGINEERING, 2012-2014

Aerospace engineering education spanning design, analysis, systems, and mission work.

Selected evidence

First author: From Napkin to Orbit in 9 Months; The TechEdSat Spacecraft Mission

Co-author: EcAMSat - NASA's First 6U Biological Spacecraft

Co-author: EcAMSat spaceflight measurements of antibiotic resistance in microgravity

Named inventor: Affordable Vehicle Avionics System - U.S. Patent 10,669,045

Technical toolbox

AI and ML: large language models, RAG, multi-agent systems, fine-tuning, LLM evaluation, vector databases

Systems and infrastructure: Kubernetes, Docker, CI/CD, cloud-native services, scalable verification

Programming and tools: Python, TypeScript, JavaScript, C, Kotlin, Swift, MATLAB, GCP, AWS

Honors

Aerospace Engineering Outstanding Leadership Award; Outstanding Aerospace Engineering Award; CHARM Spacecraft Development Team Group Achievement Award; TechEdSat Project Team Group Achievement Award; Space Flight Awareness Team Award.