Contact

SF Bay Area 408-679-3915 (Mobile) aaronxcohen@gmail.com

www.linkedin.com/in/aaronjcohen (LinkedIn)

Top Skills

Al Agents

Large Language Model Operations (LLMOps)

Professional Driving

Languages

English (Native or Bilingual) Hebrew (Elementary)

Spanish (Elementary)

Certifications

National Response Framework, An Introduction

CPR/AED for Professional Rescuers and Health Care Providers

Executive Protection & Evasive Driving

FEMA Communications Specialist Introduction to Incident Command System

Honors-Awards

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

Publications

Payload hardware and experimental protocol development to enable

Aaron Cohen

Al Engineering Manager @ NVIDIA San Jose, California, United States

Summary

As a seasoned professional with a diverse background, I currently serve as a Manager and System Requirements Owner for NVIDIA's "Level 2" autonomous vehicle features. My experience spans various facets of the engineering domain, from quality engineering—where I developed scalable frameworks for testing autonomous vehicles in cloud environments—to my formative years as a Spacecraft Systems Engineer at NASA Ames Research Center.

During my 7-year tenure at NASA, I contributed to an array of projects, including CubeSats, sub-orbital rockets, and space station payloads, while also publishing 14 research papers in respected conference proceedings and esteemed journal publications. This accomplishment showcases my commitment to advancing knowledge in the field and sharing insights with the broader engineering community. My expertise encompasses the full life-cycle of electronic systems, from design and build to testing, as well as project management and systems engineering.

Furthermore, I possess a strong aptitude for spacecraft design, analysis, assembly, testing, interface control, and safety review. My skill set also extends to the development of robust spacecraft software, hardware-in-the-loop debugging, and risk analysis and mitigation. Overall, my diverse experience and commitment to excellence make me an invaluable asset in the ever-evolving landscape of technology and innovation.

Soft Skills:

Effective communication, people management, emotional intelligence, servant & collaborative leadership style.

Hard Skills:

C, Python, Kotlin, Swift, Bash scripting, SVN, Git, Windows, Linux (CLI and GUI), Mac OS X, 90WPM Typing, PIC16, Arduino,

future testing of the effect of space microgravity on the resistance to gentamicin of uropathogenic Escherichia coli and its σs-deficient mutant

2016

EcAMSat spaceflight measurements of the role of σs in antibiotic resistance of stationary phase Escherichia coli in microgravity

EcAMSat: Effect of Space-Flight on Antibiotic Resistance of a Pathogenic Bacterium and its Genetic Basis

EcAMSat: A Small Satellite Flown to Explore the Role a Sigma Factor Plays in E. coli's Response to the Antibiotic Gentamicin

Patents

Affordable Vehicle Avionics System
Agentic Workflows for Managing and
Testing System Requirements

I2C, UART, SPI, USB, Matlab, STK, Design for Test, Design for Manufacturing, PCBA Design and 3D Design.

Experience

NVIDIA

4 years 1 month

Manager, Software Systems
June 2025 - Present (3 months)
Santa Clara, California, United States

Leading the design and implementation of a generative AI framework for complex reasoning in systems engineering. Our system leverages retrieval-augmented generation (RAG), graph-based reasoning, and critique-driven iteration. We deploy role-specific agents (e.g., researchers, critics, linters) that collaborate to produce and validate domain-specific outputs for real-world applications.

Manager, Software Systems
December 2022 - June 2025 (2 years 7 months)
Santa Clara

Manager & system requirements owner for 9 of NVIDIA "Level 2" autonomous vehicle features, including:

- Cruise Control
- Adaptive Cruise Control
- Adaptive Cruise Control with Lane Keeping
- Automatic Lane Change Assist
- L2+ (Active Traffic Control Assist)
- L2++ (Address to Address urban driving)
- Hands Free Level 2 Driving
- Emergency Escalating Stopping Function

Responsibilities include product definition, feature roll-out planning, system architecture design and functional decomposition, requirements authoring, and test case definition.

Product Owner for Generative AI tool that can automatically create system requirements, test cases and simulation code.

Supporting Mercedes-Benz and Jaguar Land Rover customer functions. Reports to Senior Director.

Senior Software Systems Engineer August 2021 - December 2022 (1 year 5 months)

Santa Clara, California, United States

Document-based Systems Engineering (JAMA), Model-based Systems Engineering (Cameo/Magic Draw), ASPICE/ISO26262

Menlo Park Fire Protection District Communications Specialist, CA-TF3 January 2017 - Present (8 years 8 months)

Menlo Park, California

Deploying to disaster zones to establish emergency communications infrastructure in support of Urban Search & Rescue missions.

Previous deployments include:

- Hurricane Olivia 2018
- North Complex Fire 2020

CA-TF3 is a part of the FEMA National US&R program (ESF 9)

Lyft Staff Qual

Staff Quality Engineer February 2020 - August 2021 (1 year 7 months)

Palo Alto, California

Autonomous Vehicles

Cruise

Senior Systems Test Engineer June 2018 - January 2020 (1 year 8 months)

San Francisco

Autonomous vehicle simulation

Scalable automatic test generation

Subsystem, System & E2E testing experience for Computer Vision, RADAR and LiDAR segmentation, Sensor Fusion & Prediction

Onboarding instructor for both department and team

Hiring committee member

Built a RESTful API on the Flask framework to orchestrate test generation through scenario metadata association & inference, containerized using Docker & deployed using Google Kubernetes Engine. Set up CI/CD using CircleCI.

NASA Ames Research Center

7 years 10 months

Systems Engineer III

December 2014 - June 2018 (3 years 7 months)

NASA Ames Research Center

Contractor with Stinger Ghaffarian Technologies (SGT)

Electrical & Test Engineer for EcAMSat Spacecraft

CLAS-ACT: UAV RF Link Design & Analysis, UAV Mission Design

AVA: Test Engineer & Launch Campaign Manager

NASA UTM Systems Engineer

Task Lead

Technical Rescue Specialist - Cadet

August 2014 - May 2018 (3 years 10 months)

NASA Ames Research Center

NASA Disaster Assistance and Rescue Team

Electrical Engineer II

December 2013 - December 2014 (1 year 1 month)

Contractor with Millennium Engineering and Integration Company (MEI)

Proposal Manager

Launch Vehicle Integration

Systems Engineer - Space Systems

July 2012 - December 2013 (1 year 6 months)

Contractor for ASRC Research and Technology Solutions (ARTS)

Mission operations for TechEdSat

Command and Data Handling lead for CHARM

Flight Software team member of the EDSN mission.

ARTS Task Lead for EDSN Spacecraft Mission.

USRA EAP Intern - OCT Aerospace Engineer

July 2011 - July 2012 (1 year 1 month)

Moffett Field, CA

Project Manager for TechEdSat spaceflight mission. 6 month project to fly a 1U CubeSat (10x10x10cm, 1.3kg spacecraft) on the first deployment of CubeSats from the International Space Station.

Developed flight software for Safe Mode processor (C on PIC16) and for Nominal Mode processor (C++ on ARM Linux, utilizing SPA architecture).

Worked with the Johnson Space Center's (JSC) Payload Safety Review Panel (PSRP) to get payload approved for flight aboard the ISS.

Managed the collaboration between two international teams (One at NASA Ames, one in Sweden) during rapid development of a spaceflight mission.

SPHERES Intern

September 2010 - July 2011 (11 months)

Moffett Field, CA

Laboratory support for the SPHERES mission, as well as development support for SNAPS research project.

Education

San Jose State University

B.S., Aerospace Engineering · (2007 - 2012)

San Jose State University

MS, Aerospace Engineering · (2012 - 2014)