

I want to give you an idea of my technical background and what I hope I can bring to your company. I spent 8 years at NASA Ames Research center working in various fields of Aerospace Engineering such as Spacecraft Systems Engineering, Advanced Mission Concept Development, Electrical System Design and Spacecraft Environmental, Electrical, and Acceptance testing. I have been in the fire control bunker for a suborbital rocket that carried avionics for launch vehicle control, for which I am named inventor on a NASA patent. I have been both in federal nuclear fusion and fission reactors. I have designed cutting edge phased array communications equipment for the GlobalHawk, for which I did RF antenna design and analysis, mission flight test design & simulation. I worked on a project for the Air Force's X-37 Orbital Test Vehicle, which I cannot disclose.

After leaving NASA, I was hired to build the perception testing team at Cruise, where we were developing cutting edge machine learning algorithms in support of autonomous vehicles. While helping grow our organization by more than 10x in 18 months, I was the core developer responsible for automating the process by which events recorded on the road automatically became perception log replay simulations, and E2E perception+planning simulations for debug and analysis. This work was conducted in immediate proximity with the CEO, and often involved daily meetings with him. Some of my work in drive database analysis lead to Cruise's first publication of an uninterrupted 60 minute autonomous drive within San Francisco.

During a brief stay at Lyft, I held a staff level quality engineering position for which I built their autonomous vehicle divisions philosophy and process for verification and validation of autonomous vehicle software. I worked on the transition team with Toyota to facilitate their acquisition of Lyft's Level 5 division in 2021.

For the past 4 years at NVIDIA I started and built out our product systems engineering team for L1 and L2 autonomous vehicle technologies, such as CruiseControl, Adaptive Cruise Control, Adaptive Cruise Control with Lane Keeping, Driver Initiated Lane Change, System Initiated Lane Change, Hands Free Highway Driving, Active Traffic Control Assist, Advanced Urban Address to Address Driving, EcoAssist (automated regenerative braking during manual driving), I managed a team of more than 10 engineers, including employees in the USA & China, as well as contractors in Poland. I managed international engineering relations between NVIDIA and Mercedes Benz in Germany, and Jaguar Land Rover in England.

On the side at NVIDIA I started an internal startup to leverage agentic artificial intelligence systems to perform automatic system design from the decomposition of product documentation into engineering requirements, and the automatic creation of test cases, python simulation code for simulation, and analysis of any aforementioned artifacts. This work is currently patent pending, with my name listed as primary inventor.