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Cori Cook
University Recruiter
NVIDIA Corporation
Santa Clara, CA

Dear Cori Cook,

I wanted to express my interest in the Software Engineer Intern, AI Infrastructure - Autonomous Vehicles position at NVIDIA. Specifically, I have a background in autonomous vehicle (AV) infrastructure at Cruise Automation and cloud infrastructure at Fidelity Investments, which I believe would fit well with NVIDIA's work in AI and autonomous vehicles.

I am currently pursuing my degree in Computer Science at the Georgia Institute of Technology, where I have developed skills in Golang, Python, and C++. I believe that my academic background, combined with my practical experience, will allow me to work independently and lead development efforts, as noted in the job description.

At Cruise, I was involved in improving the reliability of the core infrastructure for AV systems. My work, primarily in Golang and Linux, focused on developing scalable and distributed services, and I believe these same skills will be required for handling large-scale AV workloads at NVIDIA. This experience at Cruise has also given me an understanding of the technical challenges of deploying AI-driven systems in real-time environments, especially at a company where autonomous vehicles are core to the company's business like NVIDIA.

Additionally, my experience at Fidelity allowed me to learn about cloud infrastructure in the real world, specifically with AWS, Terraform, and Kubernetes, which is directly applicable to NVIDIA's need for developing tools to manage petabytes of data and cloud-based GPU/CPU compute resources. I can use my experience in Terraform to create automated and scalable deployments for NVIDIA's AI platform. This experience has prepared me to contribute effectively to NVIDIA's cloud platform, especially in improving the efficiency of AV developers.

I am excited to join NVIDIA, which is a leader in technology innovation, especially within the domain of autonomous vehicles. Thank you for considering my application and I look forward to potentially contributing my skills to NVIDIA's AI infrastructure team next year. I look forward to hearing back from you soon.

Sincerely,
Pranay Shah
Georgia Institute of Technology

Job Description

NVIDIA is hiring extraordinary Software Engineer Interns to develop infrastructure for accelerating the development of Autonomous Vehicles (AV). As an intern at NVIDIA, you will help develop the platform to run large scale AV workloads in the cloud. We are seeking a candidate with strong programming skills, an understanding of cloud technologies, systems engineering, and distributed systems. Together, we will build the exa-scale software 2.0 cloud platform for one of the most exciting and ambitious problems of our time: autonomous vehicles!

What you'll be doing:

- Build scalable and distributed services that will power large scale AV workloads like deep learning model training, data processing and simulation
- Develop scalable tools which provide access to PBs of data, GPU / CPU compute and car hardware in the cloud in order to improve efficiency of AV developers

What we need to see:

- Currently pursuing BS, MS, or PhD in Computer Science/Engineering, Electrical Engineering, Math/Physics/Statistics or related field
- Proficiency in software development using Golang, Python, C++, C, JavaScript, Java/Scala or similar
- Ability to work independently and lead your own development effort
- Good teamwork and interpersonal skills

Ways to stand out from the crowd:

- Experience working with Kubernetes, Docker, Terraform, and large scale production systems
- Hands on experience with Linux and system tools
- Familiarity with HPC workloads
- Familiarity with Embedded systems and Software/Hardware cross-domain knowledge

NVIDIA is widely considered to be one of the technology world's most desirable employers. We have some of the most forward-thinking and talented people in the world working for us. If you're creative, autonomous and love a challenge, we want to hear from you!