Chandramouli Gnanasambandham, Dr.-Ing.

Böblingen, Germany • + 49 179 6588043 • *chandramouli681990@gmail.com* • *Linkedin* • *GitHub* • *Matlab*

Software Integration Engineer

Advancing Intelligent Vehicles with Expertise in System Integration and Scalable Software Architectures

11. February, 2025

Hans-Peter Loeb
Engineering @ Applied Intuition
Stuttgart, Baden-Württemberg, Germany

Dear Mr. Loeb,

Application for the Postion of Software Integration Engineer

With Torc Robotics closing its European entity at the end of Q1 2025, I am seeking new challenges and opportunities in the automotive software field. The *Software Integration Engineer* position on your job portal caught my attention, as it presents an exciting opportunity to leverage my experience and skills to make meaningful contributions to your team.

As a Staff Software Engineer at Torc Europe GmbH, I am responsible for the development and maintenance of a real-time, physics-based vehicle model of a Freightliner Cascadia AP4 truck.

Recent Achievements and Key Project Deliveries

- ✓ **Led development of physics based vehicle models** (300+ users) using test-driven development and C++.
- ✓ **Integrated real-time models into ROS2 simulator** for V&V activities, ensuring ISO-26262 compliance.
- ✓ **Proficient in Git, DevOps and Containerization tools** for scalable and maintainable software solutions.
- ✓ **Led collaborative design and development** of a cutting-edge integration-test-platform for models in Python.
- ✓ **Played a vital role in providing simulation expertise** to tune control algorithms for safety-critical systems.

At Daimler Truck AG, I gained valuable experience in high-fidelity mechatronic simulations using Synopsys Silver and MATLAB/Simulink, including CAN bus simulations for control system development in advanced driving systems. This hands-on experience in automotive software integration, combined with my proven track record of leading international teams and collaborating with automotive OEMs, aligns perfectly with the requirements of the role.

Having gained extensive experience with various simulation tools for ADAS and AD development, I am convinced that Applied Intuition provides the industry's leading software solutions. Its seamless cloud integration, adaptability for custom interfaces, and vast parameterization capabilities make it stand out in the market. I would be excited to contribute my expertise and be part of Applied Intuition's innovative journey.

Thank you for considering my application.

Best Regards,

Dr.-Ing. Chandramouli Gnanasambandham