

ANDI ZHOU

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Dear Hiring Manager at Schaeffler,

I am writing to express my strong interest in the Thermal Verification and Validation Engineer position at Schaeffler. My direct experience with Schaeffler drive units during my internship at Zoox has provided me with a firsthand appreciation of the exceptional quality of your products! With a master's degree in aerospace engineering specialized in Computation Fluid Dynamics from the University of Michigan, and hands-on experience in thermal system testing and validation through my internships, I believe I am well-equipped to contribute meaningfully to your team.

While my time in the industry may appear shorter compared to more senior candidates, the depth, outcomes, and intensity of my internships, coupled with my unwavering passion for heat transfer, have equipped me with a skill set that I am confident can rival those with longer periods of industry exposure.

At Zoox, I revived a coolant fluid system test stand that was stagnant for 2 years in just 9 weeks. My design recommendations, based on my testing data, increased the system flow rate by 7.5%. My manager highlighted my fast-paced work ethic and emphasized that I produced more data in 9 weeks than the project had in the previous 2 years.

Further enriching my experience in CFD software are my internships at Volvo Truck North America, where I designed a swirl air-coolant separation tank using Star CCM+ multiphase flow, achieving a 99% air separation efficiency and reducing its mass by 40% compared to the original concept given.

For a verification and validation engineer, I believe it is especially important to understand both sides of simulation and validation. It's not just about producing the optimal geometry in CATIA or converging the simulation down to 6th order of accuracy in Star CCM. It is about understanding how one correlates with the other and ensuring the design's robustness and efficiency. I believe my hands-on validation experience at Zoox, coupled with simulation and design experience at Volvo would make me an asset to the team.

Joining Schaeffler allows me to utilize my skills and knowledge within an environment that prioritizes innovation, teamwork, and global impact, particularly in the context of the current electric transformation. As the world inches closer towards an electrified future, I am deeply committed in bringing my expertise to address the various challenges and collaborate across a global team to drive success!

Thank you for considering my application, and I am looking forward to hearing from the team.

Sincerely,

Andi Zhou