@Zoox:

- Took charge of a 2-year stagnant powertrain cooling system test stand and revived it in 9 weeks

- Automated entire testing process via scripting, decreased testing time from 180 minutes to 30 minutes (80%)

- Correlated data with 1D thermal simulation

- Designed instrumentation plans to obtain flow variables such as pressure and volumetric flow rates

- Increased system flow rate by 7.5%

- Hands-on constructed and built the entire testing set-up

- Gained a fundamental understanding of heat transfer within electric vehicle thermal systems

@ Volvo Truck

- Used STAR CCM+ multiphase flow to optimize a swirl air-coolant separation tank

- Maintained separation efficiency of 99% while decreasing mass by 40% from the original concept

- Determined an optimal inlet flow velocity to maintain air-coolant separation

@ Custom CFD Project

- Implemented first-order and second-order solvers for 2D Euler's compressible flow

- Integrated my own adaptive meshing algorithm

- Implemented 2D heat equation finite difference solver

- Gained a fundamental understanding of the mathematics of Computational Fluid Dynamics

I bring a strong passion for learning and for electrifying the future of transportation. My hands-on experience with automotive thermal systems, in addition to thermal simulation, provided me with a unique perspective on data correlation between design and testing. My fast-paced work ethic, combined with a passion for electric vehicles, aligns me seamlessly with Tesla's mission and vision.

As an intern at Zoox's Fremont factory this summer, I was Tesla's neighbor for three months. During that time, I had the unique opportunity to witness the Tesla Cybertruck and Tesla Semi firsthand. Reflecting on those moments, they stand out as some of my most memorable experiences from the summer.

While many have criticized the appearance of Tesla's Cybertruck (and I must admit, I share some of those sentiments), I also see that as a prime example of the company’s bold pursuit of innovation and breaking industry norms. This drive for innovation is what excites me the most about the prospect of working for Tesla.

Thank you for considering my application, and I cannot wait to hear back from the team!

Sincerely,

Andi