

ANDI ZHOU

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Dear Hiring Manager at Ford Motor Company,

Having had the privilege to engage with Ford representatives on two separate occasions at the University of Michigan — once during the UMich engineering career fair and another time at Company Day — I was left with a profound appreciation for the camaraderie and approachability that seems intrinsic to Ford's ethos. My conversation with Mr. Anthony Ha, a Powertrain Supervisor, was particularly enlightening. His genuine warmth, willingness to share insights, and evident pride in Ford's work reinforced my belief in Ford as not just a pioneering automotive giant, but also as a nurturing environment for its workforce. This is what really compelled me to apply for the entry level Powertrain/Exhaust Design Release Engineer position at Ford Motor!

My experience at Zoox and Volvo has gifted me a profound knowledge of automotive powertrain systems, whether it be simulation or validation.

At Zoox, I revived a powertrain coolant system test stand that was stagnant for 2 years in just 9 weeks. This project sought to validate the 1D simulation previously conducted by our team. 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 as a powertrain simulation intern, 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.

As a design and release engineer, I believe it is especially important for us to understand both sides of simulation and validation. It's not just about simulating designs or validating results in isolation; it's about understanding how one informs the other and ensuring the design's robustness and efficiency. My hands-on validation experience at Zoox coupled with simulation and design experience at Volvo would make me an asset to the team.

Ford's legacy in the automotive world is unparalleled, and the opportunity to be part of this journey is thrilling. However, it is the blend of this legacy with the inclusive and supportive culture that makes Ford truly special to me.

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

Sincerely,

Andi Zhou