

ANDI ZHOU

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Dear Hiring Manager at Microsoft,

I understand that you may find my resume intriguing. My background, with its blend of aerospace education and automotive experience, may seem unconventional for a Thermal Engineer role at Microsoft.

At a young age, I dreamed of working on airplanes. Yet, after one internship in the aerospace industry and two internships within automotive companies, I realized that my true passion lies in engineering products that weave into people's everyday lives. The Xbox console exemplifies this ideal. It's not just a gaming device; for many, including me, it's a source of cherished memories, a bridge to distant friends, and a canvas for boundless imagination. The prospect of working at Xbox and bringing this emotion for millions of people worldwide fills me with great excitement and joy.

While I'm aware that I may possess experience in a different industry, the laws of heat transfer remain universal. The depth, intensity, and outcomes of my internships and project team experience have equipped me with a skill set I am confident rivals that of many with more extended periods of exposure.

At Zoex, 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 thermal 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 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 thermal 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. Rather, it's about understanding how one informs the other and ensuring the design's robustness and efficiency. I believe my hands on validation experience at Zoex, coupled with simulation and design at Volvo would make me an asset to the thermal engineering team at Xbox.

Thank you for your consideration. My past experiences, though non-traditional, underscore my passion for engineering and a relentless drive for innovation and learning. I'm confident in my ability to contribute meaningfully to the team and am excited about the possibility of joining as a Thermal Engineer.

Thank you and looking forward to hearing back from the team!

Andi Zhou