## **Austin Chan**

Staff Machine Learning Engineer at Airbnb

## Hello Anthropic Team,

I'm very excited about the Knowledge Bases team at Anthropic. I'm an ML engineer and tech lead at Airbnb, specializing in ML model design, training and evaluation, and scalable data engineering for search ranking and retrieval on the Core Ranking team. I've designed and launched cutting-edge ranking ML models to production with significant business gains, and led foundational projects that have sped up ML model research iteration time by 3x.

I'm incredibly drawn to the Knowledge Bases team's mission to improve how Language Models interact with external data sources. I believe there is a tremendous opportunity to enhance the depth and accuracy of Al responses and decision-making through advances in external data retrieval.

I was excited by Anthropic's recent work on Contextual Retrieval, which uses Claude summary snippets to calculate Contextual Embeddings and Contextual BM25 and significantly reduce retrieval failures. I believe the massive success of these techniques shows that this field is still in its early stage, as simple, clever techniques can still have a major impact, and I'm very interested to contribute to cutting-edge research even further. For example, I'd like to explore reranking techniques further using transformers, which have recently proven very successful at Airbnb, and I believe my skills and ranking experience could meaningfully contribute to your team and mission.

I couldn't be more excited about the possibility of working with your team and contributing to Anthropic's mission. Thank you for considering my application.

**Austin Chan**