

Dear Hiring Manager,

I am writing to express my deep interest in the Machine Learning Engineer position at Osmo. With a solid academic foundation and extensive research experience in the fields of Artificial Intelligence (AI) and Machine Learning (ML), I am confident that my background aligns exceptionally well with the requirements of this role. Furthermore, my lifelong passion for technology and problem-solving drives my aspiration to contribute to Osmo's groundbreaking work.

My academic journey, culminating in a master's degree in computer science, has equipped me with the knowledge and skills necessary to excel in this position. During my tenure at the University of Southern California, I immersed myself in AI and ML, engaging in coursework spanning a diverse range of topics, from machine learning algorithms and data mining to natural language processing. This academic foundation provided me with a robust understanding of data structures, algorithms, and software design principles—essential elements in developing effective ML solutions.

Complementing my academic pursuits, my research experiences have further honed my abilities and expertise. I have spearheaded diverse projects, such as the creation of a novel food image-to-recipe generation pipeline and the development of a privacy-aware question-answering system for mental health risk assessment. These undertakings required a profound grasp of AI techniques and their practical implementation, including proficiency in Python and the utilization of prominent ML frameworks such as TensorFlow and PyTorch. My research background not only bolstered my technical aptitude but also honed my problem-solving skills, enabling me to adeptly tackle complex challenges.

Osmo's pioneering work in olfaction and molecular chemistry using machine learning is particularly intriguing to me. My passion for staying current with machine learning literature, especially as it applies to solving real-world problems, positions me to swiftly prototype ideas from the research field—a skill I am eager to apply in addressing intricate challenges at Osmo.

I am no stranger to diverse datasets, and I excel in understanding their nuances to derive meaningful training and testing data for real-world machine learning models. My track record includes crafting innovative model architectures and inventive data featurizations, harnessing the full potential of available data to unlock novel ML capabilities.

Collaboration is integral to success, and I look forward to closely working with software engineers and product managers to fortify Osmo's capabilities in scent and olfaction using our ML platform. My proficiency extends to areas such as linear algebra and statistics, foundational to the world of machine learning. Additionally, I possess hands-on experience with machine learning frameworks like PyTorch and TensorFlow, enabling me to apply these techniques to real-world challenges.

I am eager to contribute my skills and knowledge to Osmo's mission, which aligns with my deep-seated commitment to using technology as a tool to address real-world problems. My willingness to work closely with the Osmo team, either in your New York City office or through periodic travel, underscores my dedication to becoming an integral part of your innovative projects.

Thank you for considering my application. I am excited about the possibility of discussing how my background and passion for technology can contribute to Osmo's ongoing success.

Sincerely  
Dhiraj Chaurasia