

Apple Inc.

Dear Hiring Manager,

I am writing to express my keen interest in joining Apple Inc. My extensive experience in machine learning, particularly in innovative applications and the development of novel algorithms, aligns seamlessly with the cutting-edge work your organization is renowned for.

In my PhD research at UC Santa Cruz, I introduced the Wasserstein Consensus ADMM to solve measure-valued optimization problems with convex additive objectives. The proposed distributed method I developed has promising applications in stochastic prediction, Learning theory, Generative AI, and learning that can be cast in this form of measure-valued convex additive optimization. For instance, it has made solving the Wasserstein Barycenter problems more efficient, especially when working in a distributed manner. Currently, the paper detailing this work is under review for publication in the SIAM Journal on Mathematics of Data Science.

I've also done important work with physics-informed neural networks. I realized the limitations of traditional networks in certain applications and took the initiative to develop a new class, specifically tailored to minimize probability distributional losses. The paper detailing this innovation is set to be published in the IEEE Transactions on Control Systems Technology journal.

I want to highlight my leadership skills, which have been a significant part of my academic and professional journey. As part of my doctoral research, I have led and mentored a team of graduate students at UCSC and UC Berkeley to perform research on high-performance feedback control for colloidal self-assembly via state-of-the-art tools in stochastic control and machine learning.

Besides the academic collaborative research mentioned above, I am currently leading an industry-university collaborative effort with the Palo Alto Research Center on deducing a controlled mean-field dynamics model for micro-assembly using dielectrophoretic forces induced by an array of electrodes.

Thank you for your time and consideration. I look forward to discussing how my experience and interests would be a good fit for Your team.

Sincerely,
Iman Nodozi