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Dear Hiring Manager,

I am here writing to apply for the Data Scientist Lead position posted on Citi's Career website. The exciting opportunity appears to be a wonderful fit with my professional experience, personal interests, and career goals.

As an AI/ML engineer of 22 years of experience, I have acquired in-depth and comprehensive training and experience in many areas relevant to the position. During my time in eBay (Shanghai) and Alipay, I learned and practiced a lot of data extraction and analysis, with SQL, Map/Reduce, Spark with Java/Scala being the tools I used on a daily basis. At eBay, I developed a bot traffic detection algorithm using SVD which helped increase the detection rate by 10%, which is a huge improvement. While certainly not a direct map to Citi's risk management mission, the underlying concept of anomaly detection is the same. You may notice that my strength lies in AI/ML algorithms. I have a deep understanding of traditional ML algorithms (including Logistic regression, random forests, GBDT, etc.) as well as trending LLMs model structures and algorithms. Much of this has been gained from my time working for a variety of companies including Panasonic, Microsoft, eBay, Alipay, and Series C startups. I have now devoted myself into LLMs and use it in our researcher copilot initiatives, including RAG and multi-agent systems. I have been closely following the development of LLM algorithms and I am very familiar with recent papers, e.g., YaRN, Quiet-STaR, and DeepSeek-V2. I believe I can bring in GenAI and LLMs to solve problems that were previously unsolvable.

Jack Ma has said, "if the banks don't change, we'll change them." Perhaps he was too radical, but the call to bring Internet-developed technologies into the banking industry is real. If I have the honor to join Citi, I would have the opportunity to leverage my past AI/ML experience to help improve traditional data mining, data analysis and predictive modeling. At the same time, I am taking this opportunity to advance my career and explore new life experiences for my family.

I am available via email or phone to arrange any early or professional interviews. Thank you for your time and consideration.

Yours sincerely,

Yan Pengju