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Recipient:
Microsoft Hiring Team

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Cover Letter,

Dear Hiring Manager,

I am writing to express my interest in the Applied Scientist position within the Content Intelligence team for Business Chat at Microsoft. With a robust background in AI/ML and cloud technologies, I am eager to contribute to Microsoft's mission of advancing intelligent business solutions.

In my current role as Founder and AI Engineer at MXAI, I have successfully developed and deployed AI-powered solutions integrating a variety of services mainly from AWS, and I'm confident that I can very quickly translate my skills to Azure services. Besides, the experience obtained in previous roles with LLMs, RAG, RNNs, in feature-training-inference pipelines and batch ML systems directly relate with the responsibilities listed in the job description like conducting experiments, design guardrail metrics, and optimize performance collaborating with partners to deploy solutions to production.

During my master's studies, I crafted a custom training algorithm using the extended Kalman filter theory to propose numerically stable weight update rule for within-host viral infection forecasting which deepened my understanding of neural network training nuances and enhanced the applicability of the training algorithm to real-world problems containing noise. Since then, I have grown with projects and tooling like CometML and ZenML for experiment tracking, model versioning, and deployment. Nevertheless the passion for ML and LLMs inner working, has continued to lead me to develop cutting edge understanding of modern ML techniques such as Transformers, Physics Informed Neural Networks and LLMs pretraining, postraining, and inference, as showcased on my GitHub and Hugging Face profiles. I am deeply grateful to the authors of seminal works—such as Ian Goodfellow's 'Deep Learning', Maxime Labonne and colleagues' 'LLM Engineer's Guidelines', and the collective insights behind 'The Llama 3 Herd of Models'—whose contributions have profoundly enriched my understanding of deep learning and shaped my approach to MLOps/LLOps and large language model development.

In work environments I am particularly proud of my innovative solutions at Kuona, where I proposed using QLora for model fine-tuning, Locally Interpretable Models and custom loss functions to target business KPIs. At Entropía AI, I spearheaded the development of RAG pipelines, significantly improving accuracy in QA benchmarks for legal and academic custom datasets critical for the development of Icaro AI.

As a bilingual professional with a C1 level in English, I have effectively led customer sales meetings and demo presentations. I am enthusiastic about collaborating closely with partners to deploy solutions to production and maintain quality over time through guardrail metrics and sanity test cases.

I am excited about the opportunity to join Microsoft and contribute to its success by leveraging my expertise in AI/ML and cloud technologies. Thank you for considering my application. I look forward to the possibility of discussing how I can contribute to your team.

Sincerely,

Daniel Iván Parra Verde