Amirehsan Davoodi

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Hiring Committee
Cummins Asia Pacific
Beijing, China

Subject: Application for AI Intern – LLM

Dear Hiring Committee,

I am writing to apply for the AI Intern – LLM role at Cummins Asia Pacific in Beijing. I am a PhD candidate in Artificial Intelligence at Amirkabir University of Technology (AGML Center) and hold an MSc in AI from USI (Università della Svizzera italiana), Lugano. My background spans NLP/LLM applications, data engineering, and reliable software delivery, with hands–on experience building agentic AI systems and integrating large language models into production–ready services.

I am excited by the internships focus on the automotive and industrial domains. I have led data curation efforts that involve collecting heterogeneous sources (technical texts, code, logs), designing pragmatic cleaning and annotation guidelines, and establishing reproducible data pipelines and versioning. These practices translate directly to building high–quality corpora for domain–adaptation and evaluation of large language models in settings such as technical support, troubleshooting, and knowledge assistance.

On LLM application development, I have designed and implemented retrieval–augmented generation (RAG) and task–oriented assistants for question answering and support workflows, using prompt engineering, tool/function calling, and careful context construction. I am comfortable building service backends (e.g., FastAPI), containerizing and deploying with Docker, and instrumenting evaluation loops to track latency, accuracy, and robustness. My recent industry work exposed me to cloud LLM platforms and model orchestration, and I am familiar with adapting open–source models (e.g., Llama family, ChatGLM) for specific tasks and languages when appropriate.

For training and inference optimization, I take a measurement–driven approach: establishing baselines, iterating on prompts and retrieval, and, where needed, applying parameter–efficient fine–tuning to close gaps while keeping inference efficient. I value interpretable evaluation: beyond standard correctness metrics, I assess grounding faithfulness, retrieval quality, and error taxonomies that map to actionable data or model changes. This iterative loop has been key to shipping reliable assistants in safety–sensitive contexts.

I communicate clearly and document rigorously. My research experience (e.g., ASD–GraphNet, Computers in Biology and Medicine, 2025) and my role as a startup co–founder in Switzerland strengthened my ability to translate technical work into concise documents and stakeholder updates, and to collaborate across research, product, and engineering teams.

Given the recent relocation of my PhD supervisor abroad due to regional instability, I am seeking a stable, impact–oriented environment aligned with my interests in applied LLMs. Cumminss mission

and the internships responsibilities—from data collection and domain adaptation to application delivery and evaluation in automotive/industrial scenarios—are an excellent fit. I am available for a 4–6 month internship, can contribute in a hybrid setting in Beijing, and am eager to explore intelligent customer support, automated Q&A, and fault diagnosis assistants built on robust LLM foundations.

Thank you for your time and consideration. I would welcome the opportunity to discuss how I can contribute to Cumminss LLM initiatives.

Sincerely,

Amirehsan Davoodi