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To:
Celonis
Darmstadt, Germany

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Dear Hiring Team,

I am excited to apply for the Software Engineer - ML/AI position at Celonis. My academic background in Computer Engineering, combined with hands-on experience in AI/ML systems and software engineering, equips me to contribute meaningfully to your team's mission of driving operational efficiency through advanced technology.

At the Humanoid Robots Lab, I developed AI solutions for robotics, including programming a ROS interface for 3D localization and using simulators like iGibson to generate data for training reinforcement learning algorithms. This experience mirrors the challenges of working with Celonis' enterprise operational data and AI tools. Additionally, my open-source projects, such as extending ROS 2 Whisper for live transcription and designing pipelines for parallel computer vision tasks, highlight my ability to build robust, scalable infrastructure—skills directly aligned with the role.

My recent projects have focused on Natural Language Processing and database tools, positioning me to adapt quickly to work at Celonis. For example, I used Large Language Models (LLMs) to search a database with semantically similar queries, a project available on my GitHub. I am also extending an existing project to work with NoSQL databases, mapping common objects across computer vision datasets to unique object labels. This enhancement enables easier visualization and cross-verification of models trained on different datasets. Additionally, I utilized the C++ CURL library to interact with Ollama, locally-hosted LLM models, creating a ROS 2 interface for handling offline queries. These experiences demonstrate my ability to deliver innovative and practical solutions in AI/ML engineering.

I am drawn to Celonis for its innovative approach to process mining and operational data, and I am eager to bring my expertise to your mission. I welcome the opportunity to discuss how my background can support your team's goals.

Thank you for considering my application.

Best Regards,

Nathan B. Corral