Amirehsan Davoodi

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Hiring Committee
DNV Artificial Intelligence Research Center
Shanghai, China

Subject: Application for AI Research Intern (Computer Vision)

Dear Hiring Committee,

I am writing to apply for the AI Research Intern (Computer Vision) position at DNVs Artificial Intelligence Research Center in Shanghai. 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 work spans computer vision, graph learning, and agentic AI systems, with strong Python/PyTorch engineering experience and a track record of translating research ideas into working prototypes.

My recent research includes ASD–GraphNet (Computers in Biology and Medicine, 2025), a graph learning approach for clinical neuroimaging, and prior work on graph–based representations for time–series anomaly detection. Alongside academic research, I have built production systems in industry roles (e.g., Tali AI) and co–founded a Swiss startup (UbiHealth) focused on intelligent health wearables. These experiences strengthened my ability to design end–to–end pipelines, curate and iterate on datasets, and validate models against real–world constraints.

I am particularly motivated by DNVs applied research across maritime, energy systems, and digital assurance. The internships responsibilities—implementing and optimizing computer vision algorithms, iterating on datasets and evaluation, and contributing to areas such as detection, segmentation, image generation, and vision foundation models—align closely with my interests and skills. I am comfortable building training and evaluation loops in PyTorch, experimenting with data augmentation and self–supervised objectives, and conducting careful error analysis to drive model and dataset improvements. I am also keen to explore foundation model adaptation and lightweight deployment strategies that respect industrial performance and reliability requirements.

I would bring:

- Solid grounding in computer vision and pattern recognition, with practical experience in model training, evaluation, and dataset iteration in PyTorch.

- Strong software engineering skills (Python, data pipelines, APIs, Docker) and the ability to quickly prototype and validate ideas.

- Research experience bridging graphs, imaging, and time–series, with a publication mindset and careful experimental rigor.

- Clear written and verbal communication in English and experience collaborating in international, cross–functional teams.

Given the recent relocation of my PhD supervisor abroad due to regional instability, I am seeking a stable, impact–oriented environment closely aligned with my research interests. I am available for a 4–6 month internship, can commit at least three days per week, and I am open to on–site work in Shanghai.

I would welcome the opportunity to discuss how I can contribute to DNVs visual intelligence initiatives across your business segments. Thank you for your time and consideration.

Sincerely,

Amirehsan Davoodi