

Dear Madam or Sir,

I am writing to express my enthusiastic interest in the Software Engineer - PyTorch position within the Frameworks team at Graphcore. I am a Senior SLAM Engineer with over 7 years of experience developing high-performance, production-grade C++ robotics software.

I am impressed by the trajectory of the company, from its inception to this day. It strikes me as a great place to work. I agree completely with Graphcore's purpose: "democratized intelligence for everyone".

My technical background aligns closely with the requirements of the PyTorch team:

- Performant C++ & Python Development: I have over 7 years of professional experience in C++ and Python. I have developed a deep understanding of how to make software architectures scalable and future-proof, and of how to face the challenges brought by multithreaded systems. I have led the design of major software epics, focusing on code quality and modern paradigms to maintain a production-grade 3D LiDAR SLAM library.
- Computationally Intensive Engineering: My work in SLAM and state estimation involves complex factor graphs, Lie algebra, and covariance propagation. I believe that the knowledge gained is transferable to developing machine learning accelerators.
- Agile Leadership & Collaboration: I enjoy working in a SAFe (Scaled Agile Framework) environment, planning future work carefully, and performing in-depth code reviews. I am often volunteering suggestions to ameliorate the team's pain points, and I find satisfaction in mentoring new engineers, always promoting a collaborative team culture.
- Systems & Infrastructure: I have extensive experience with Docker and value extremely highly the contribution to code maintainability brought by stable CI/CD pipelines.

My academic background in Artificial Intelligence and Robotics from La Sapienza provided me with a strong theoretical understanding of the AI/ML landscape. I have consistently prioritized clear software architectures alongside performant implementations. Two of the most relevant experiences I gained during that time come from developing a 3D LIDAR SLAM system from scratch and from experimenting with spiking neural networks in TensorFlow.

I am eager to bring my expertise in high-performance software engineering to Graphcore. Thank you for your time and consideration.

Yours faithfully,

Edoardo Ghini