

Dear Madam or Sir,

I am writing to express my enthusiastic interest in the Computer Vision Engineer position at Scanifly. I am a Senior SLAM Engineer with over 7 years of experience developing high-performance, production-grade C++ robotics software. I would be proud to contribute to the company mission to bring operators safety while also accelerating the expansion of the renewable energy infrastructure.

My technical background aligns closely with the requirements of this role:

- **Proficiency in Python and C++**

I have over 7 years of professional experience in C++ and Python and familiarity with OpenCV and Tensorflow (which is transferrable to Pytorch). 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.

- **Structure-from-Motion, 3D Reconstruction and Photogrammetry & Familiarity with Geospatial Data and Visual-Inertial SLAM**

My work in LiDAR SLAM and state estimation involves complex factor graphs, Lie algebra, covariance propagation, real time requirements, processing extremely dense sensor data, and implementing state-of-the-art algorithms from white papers.

- **Pointcloud and Mesh Processing** I have used extensively pointcloud inspection tools like CloudCompare and FoxGlove.

- Comfortable creating and working in containerised systems (Docker).

- I have worked to a very similar problem in one of my previous roles when I was developing the entire software stack (GUI, dynamics-aware controller, digital-twin, and driver for input peripherals) for a teleoperation robot: an industrial-grade forklift on rails to be mounted on roofs and teleoperated to remove asbestos plaques.

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

Yours faithfully,

Edoardo Ghini