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Having an ardent interest in autonomous navigation I have felt compelled to search for a job opportunity at Tesla.

Usually, when I am working on a project that interests me I become extremely passionate and channel a lot of energy into it. If I had to choose, I would say that my two greatest interests are Programming and Robotics Control, actually I believe the former to be a form of art.

Moreover, since the first academy projects, I have enjoyed greatly being able to model the evolution of dynamic systems through programming. The topic of my master thesis was **SLAM**.¹ I developed a system for autonomous navigation which performs 3D LIDAR Odometry and Tracking on high order features extracted from the point cloud.

After that I have matured even more interest in **autonomous navigation** even if my job after graduation focused on something else entirely: I was employed in INRIA as a robotics engineer where I developed a system for teleoperation. During this experience I learned a lot because I was responsible of the design and implementation of the entire pipeline software-side:

- dynamic simulation and control starting from URDF description of robots.
- GUI prototyping using an open-source C++ library.
- containerization and automation of the development environment.
- handling communication between modules with ROS.

In both these experiences, I have built a strong C++ foundation.

Finally, I want to mention an individual academic project that I completed during my masters: A **convolutional neural-net** built with **Spiking Neurons** in Pytho using **Tensorflow**, that resembles the behavior of real neurons inside the biological brain.

I am seeking a working opportunity that would allow expressing my creativity. Thus, I would greatly appreciate your review of my resume and outlined credentials. I believe that I can be a valuable addition to the Tesla team.

At your convenience, I am available for further discussion. I look forward to your response.

Sincerely,
Edoardo Ghini

¹Position tracking in 3D scenes using high order primitives. links to [code](#) and [thesis](#).