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Dr. Alexandros Paraschos
Volkswagen

Dear Dr. Paraschos,

Having an ardent interest for Robotics, I have felt compelled to search a job opportunity in Volkswagen. It was very exciting for me to hear that the company aims to *solve fully autonomous driving by the second half of the decade*.¹

Honestly, knowing that I contributed to it when this will occur, would assuredly bring me a great sense of fulfillment. 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 time of the first projects in academy I have enjoyed greatly to be able to model the evolution of dynamic system through programming. The topic of my master thesis was about **SLAM**.² I developed a system for autonomous navigation which performs 3D LIDAR Odometry and Tracking on high order features extracted from the pointcloud.

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.

I am seeking a working opportunity that would allow expressing my creativity. In particular I am searching for an engineering position in a research and development team. Thus, I think that Volkswagen will be one of the best companies to ask for it.

Sincerely,
Edoardo Ghini

¹Volkswagen newsroom article "Fully automated driving" found [here](#)

²*Position tracking in 3D scenes using high order primitives.* links to [code](#) and [thesis](#).