## LETTER OF MOTIVATION

## SUMMER RESEARCH FELLOWSHIP

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While looking for research areas, I found myself spending the most time reading papers and trying to understand the projects by the Computer Vision and Geometry group headed by Prof. Dr. Marc Pollefeys. I was specifically interested in projects involving optimization methods, semantic labeling and localization. I also think that my experience as a Civil Engineering undergraduate would be useful for projects that involve aerial photography like micro areal vehicles and drones. These are the main reasons why I would like to spend the summer with the Computer Vision and Geometry group.

With this summer program at ETH Zurich, I hope to gain a debut research experience in computer science. I only possess a theoretical and coursework based understanding of learning algorithms and optimization techniques and am yet to work on significant research problems. I hope to spend my summer working on interesting problems in computer vision and learning about the research process from the faculty and fellow students.

Specifically, I want to learn how to choose good problems, and how to discard the bad ones, how new ideas are generated by teams with diverse skills, how researchers write good papers and get them published, how to present our work to both the scientific community and the layman, and importantly, not lose our curiosity in the process.

I have wanted to join a good PhD program ever since I learnt deep learning algorithms by reading the seminal papers of the field and trying to implement them. This was what prompted me to change fields from Civil Engineering to Computer Science. This summer research fellowship will help me in my future research projects and the skills I learn here will give me the

- 1. Why visual computing / theory and algorithms?
- 2. what you hope to accomplish by coming to ETH
- 3. how it will support your academic or professional goals and prepare you for a career in research
- 4. UG transcripts note

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