Grant application - Cover letter

Edited version (clean)

Dear members of the evaluation committee,

I am pleased to present for your review my research proposal for the [redacted] fellowship. It reflects my vision on the future of aerial mapping, and it highlights its impact across different fields, such as climate change, ecology, and geodesy. Developing our ability to gather observations from the environment is pivotal to validate theories, assess critical infrastructures, monitor and prevent environmental risks.

The modern aerial mapping systems for drones result from a unique mix of technologies, and I believe I bring the key skills to make breakthroughs in this field: a multidisciplinary background and a clear understanding of the challenges to face. I earned my doctoral degree (*cum laude*) in computer engineering at the [redacted], carrying out a project that focused on the autonomous navigation of robots. I then joined as a postdoc the Geodetic Engineering Laboratory of the [redacted], where I mastered the state-of-the-art technologies for environmental monitoring and tackled unsolved problems. I published several papers in any area I investigated thanks to my unique set of skills, creative thinking, rigorous problem-solving, and genuine passion for research.

My studies have always aimed at high-impact results, and committees have already acknowledged their value supporting the development of a new mapping system I designed. This project gave me the opportunity of supervising a group of engineers, and strengthening my leadership skills. I am also co-applicant and project manager of a technology transfer initiative funded by the [redacted] Commission for Technology and Innovation. In this project, I will supervise a doctoral student who will study the theoretical foundations of high-accuracy mapping.

During my career, I worked both independently and as part of a team. I participated in several national and international research projects, which involved experimental field campaigns and close interactions with the end-users of the technologies I was developing. At the same time, I have created my own research agenda and built my network of high-profile partners, both

inside and outside academia.

Should the [redacted] Foundation support my research, I aim to establish an independent group at the Institute of [redacted] of the [redacted]. This will allow me to lead high-impact projects, which will certainly benefit from an academe at the forefront of technology.

Yours faithfully,

[redacted]

Original draft

Ladies and gentlemen,

I hereby have the honour to submit a research proposal to the attention of the [redacted] fellowship evaluation committee. The proposed research reflects my own view of the evolution of aerial mapping in the upcoming decade. The impact of such investigations is exceptional: a progress in our ability to gather detailed observations of the environment is fundamental to provide empirical evidence for studies in climate change, ecology, geodesy, but will also support the continous assessment of life-critical infrastructures and the monitoring and prevention of environmental hazards.

Modern aerial mapping systems based on small unmanned vehicles are the result of a unique mix of technologies and show influences of different disciplines. A strong multi-disciplinary background, coupled with a deep understanding of the current and future challenges, are the key to produce truly innovative breakthroughs in this field, traits which I believe to have. I obtained my doctoral degree (cum laude) in computer engineering, with focus on the autonomous navigation of mobile robots, at [redacted]. A post-doctoral fellowship brought me at the Geodetic Engineering Laboratory, at [redacted], where I came to understand the challenges and the methods behind effective environmental monitoring applications. I have already authored several scientific contributions in all the fields which I have explored, building on my unique mix of competences, fantasy, deep passion for research and on a rigorous problem solving attitude typical of the engineering background.

My ability to propose challenging and high-impact research directions has already been recognized and the outcomes of such efforts will surely bloom in the near future. I have conceived an innovative mapping system based on cooperating drones and a grant to support its development has been recently awarded under my sole responsibility. Within this project I am currently supervising a small group of young and talented engineers. I am also co-applicant and project manager of a technology transfer initiative funded by the [redacted] Commission for Technology and Innovation [redacted]. This project is supporting a brilliant researcher to undertake his doctoral studies under my co-direction, focusing on the theoretical foundations of high-accuracy map-

ping.

I have participated in several national and European research projects. These often included experimental field campaigns and a tight interaction with the end users of the investigated fundamental and technological advancements. Within these, I was able to develop my own research agenda, independently from my supervisors and I've built a network of supportive partners, excellencies both in academia and in industry, which was further extended in the preparation of this proposal.

Should the [redacted] Foundation support my efforts, I will have the chance to establish an indepentend group within the Institute of [redacted], at [redacted], and lead original and high impact research in one of the most fertile academic environments in the world.

Yours Faithfully

[redacted]

Edited version (with tracked changes)

~~Ladies and gentlemen~~Dear members of the evaluation committee,

I am pleased to~~hereby have the honour to submit~~present for your review my ~~a~~ research proposal for~~to the attention of~~ the [redacted] fellowship~~ evaluation committee~~. It~~The proposed research~~ reflects my ~~own view~~ vision on the future of ~~the evolution of~~ aerial mapping. ~~in the upcoming decade,~~and highlights its ~~The~~ impact across different fields, ~~of~~ such as climate change, ecology, and geodesy. ~~investigations is exceptional: a progress in~~ Developing our ability to gather ~~detailed~~ observations from~~of~~ the environment is pivotal to validate theories, assess ~~fundamental to provide empirical evidence for studies in climate change, ecology, geodesy, but will also support the continous assessment of life-~~critical infrastructures, monitor and prevent ~~and the monitoring and prevention of environmental~~ environmental risks~~hazards~~.

The m~~M~~odern aerial mapping systems for drones ~~based on small unmanned vehicles~~ are ~~the~~ result from a~~of a~~ unique mix of technologies, and I believe I bring the key skills to make breakthroughs in this field: ~~show influences of different disciplines. A strong~~ a multi-disciplinary background and a clear~~, coupled with a deep~~ understanding of the ~~current and future~~ challenges to face~~, are the key to produce truly innovative breakthroughs in this field, traits which I believe to have~~. I earned ~~obtained~~ my doctoral degree (*cum laude*) in computer engineering [redacted], carrying on a project that ~~with~~ focused on the autonomous navigation of ~~mobile~~ robots, [redacted] I then joined as a postdoc ~~A post-doctoral fellowship brought me at~~ the Geodetic Engineering Laboratory of the~~, at~~ [redacted], where I mastered the state-of-the-art technologies for~~came to understand the challenges ´and the methods behind effective~~ environmental monitoring and tackled unsolved problems. ~~applications.~~ I published ~~have already authored~~ several papers~~scientific contributions~~ in any ~~all the~~ area~~fields which~~ I investigated thanks to ~~have explored, building on~~ my unique set of skills~~mix of competences~~, creative thinking~~fantasy~~, ~~deep passion for research and on a~~ rigorous problem-solving, and genuine passion for research. ~~attitude typical of the engineering background.~~

My studies have always aimed at ~~ability to propose challenging and~~ high-impact results, and committees have already acknowledged their value supporting the development of a new ~~research directions has already been recognized and the outcomes of such efforts will surely bloom in the near future. I have conceived an innovative~~ mapping system I designed. ~~based on cooperating drones and a grant to support its development has been recently awarded under my sole responsibility.~~ This project gave me the opportunity of ~~Within this project I am currently~~ supervising a ~~small~~ group of ~~young and talented~~ engineers, and strengthening my leadership skills. I am also co-applicant and project manager of a technology transfer initiative funded by the [redacted] Commission for Technology and Innovation ~~[redacted]~~. In t~~T~~his project, I will supervise a ~~is supporting a brilliant researcher to undertake his~~ doctoral student who will study ~~studies under my co-direction, focusing on~~ the theoretical foundations of high-accuracy mapping.

Commented [GP1]: Not everyone in the committee has a background in your field but they all have to understand your cover letter. So it is better to use words that everyone immediately grasps.

Commented [GP2]: I removed this because it's redundant (if the robots have a navigation system, it implies they are able to move).

Commented [GP3]: Here there are too many details, it's important to get fast to the main point of each paragraph.

Commented [GP4]: You shouldn't use acronyms in the cover letter.

During my career, I worked both independently and as part of a team. ~~I have~~ participated in several national and international ~~European~~ research projects, which involved . ~~These often included~~ experimental field campaigns and close ~~a tight~~ interactions with the end-users of the technologies I was developing. ~~investigated fundamental and technological advancements. Within these,~~ At the same time, I have created ~~was able to develop~~ my own research agenda ~~, independently from my supervisors~~ and ~~I've~~ built my ~~a~~ network of high-profile ~~supportive~~ partners, ~~excellencies~~ both inside and outside academia. ~~and in industry, which was further extended in the preparation of this proposal.~~

Should the [redacted] National Foundation support my research ~~efforts~~, I aim to ~~will have the chance to~~ establish an ~~independent~~ independent group at ~~within~~ the Institute of [redacted] of the ~~at~~ [redacted]. This will allow me to lead , ~~and lead original and~~ high-impact projects, which will certainly benefit from an academe at the forefront of technology. ~~research in one of the most fertile academic environments in the world.~~

Yours Faithfully

[redacted]

Commented [GP5]: I've added a small introductory sentence to clarify the message of this paragraph.

Commented [GP6]: I don't think this is needed.