

Personal Statement

“Luck is what happens when preparation meets opportunity” - Lucius Annaeus Seneca

“You have to speak with the numbers, and they will reply back!” this was what my grandfather, a farmer, who did not have the possibility to study beyond the third grade, used to tell me to push me toward the scientific world. Although having been the Magna Graecia fulcrum of science and literature - Archimedes and Aeschylus just to mention two - the Sicilian system is flawed. *Italian Southern Question* is defined as the situation of **persistent socio-economic backwardness** of southern Italian regions, today in the form of lack of services and facilities and abundance of corruption and organized criminality. A perfect example is where I grew up, Gela, a city with 2600 years of history, exploited by the petroleum industry and paid back with the highest number of congenital malformation in Italy.

Homogenizing the educational level, never giving value to talent in the classroom, is the adopted policy, due to the scarcity of funds and the difficult social background. Luckily, my family has always given vent to my **innate curiosity**. For example, during primary school, I enjoyed asking my father about mathematics, which made me realize the power of science, and later I kept asking for new tools to perform challenging experiments and to build complex prototypes, because no access to labs was granted at school. Always fascinated by the process of creation, I autonomously designed a quadcopter, one of the first in Sicily, as high school final assignment, under the amazed gaze of my parents. Because of that and my consistency, I was admitted to the Italian National Register of Outstanding Students, a prestigious award for those who graduated *cum laude*. Moreover, in those years and I have been teaching guitar and sailing classes as licensed instructor. Despite all the adversities, I consider myself blessed, as everything has contributed to toughen me up and increase my dedication.

In order to fill the gaps caused by the *Italian Southern Question*, a common trend is for keen students, to leave home and move to northern Italy enrolling at the best universities. This is what I did at Politecnico di Torino, where I studied day and night. This effort was repaid with the possibility to join the “Young Talent Project”¹, reserved only for the top 5% students. Being among the best has been a huge **added value** for my growth, that is why I am here pursuing my dream of being part of the EECS Berkeley graduate program, since I have felt directly on my skin how crucial is the environment mixed with the personal commitment.

At university, I noticed that my peers did not have the same practical experience that I had. So I proposed to Camplus, the university merit college where I lived, to sponsor a lab where the students could directly have a finger in the pie. I raised 3k€, and I headed a passionate team of 15 international undergraduates with the aim to build quadcopters². As a leader, I faced many challenges but being seen as a model for both my academic career and my extracurricular activities has motivated me to do better, up to being able to share the idea of the lab with the Italian Minister of Public Education.

In the same year, the Italian chapter of IEEE-HKN, the international honor society of IEEE that promotes excellence in education, invited me to apply because I was one of the best undergraduates in electronic engineering. Once in, as part of the **training team**, I taught digital electronics to students with difficulties and I fostered the training of the members through special events: the more I dived into engineering, the more I wanted to pass on the knowledge I learned. Moreover, training students were so central in my role at Politecnico that I became the first Italian MATLAB student ambassador. I was committed to helping the academia in the use of the Mathworks software and my success was so high that after me other 10 ambassadors were selected in Italy.

Later on, I moved to France to enrol in a Double Degree program, catching the opportunity to study in an international environment (30+ nationalities) and learn the French approach to engineering. English courses in a French environment made me struggle, so, to tackle my difficulties I decided to enrol in special evening language classes. While there, the pandemic began and with the help of a friend, I started a **students support network** called “AsGroupWeAreStronger”, aimed to help each other in case one of us was infected. We divided ourselves into groups, headed by a leader who had to report any abnormality. In the end, fortunately, nobody was infected and I am so glad that our idea helped readily my university to keep track of students in the area.

During the last year, I have been working on a proposal of Professor Sangiovanni-Vincentelli, on how to use AI to help more people during the pandemic. I got in touch with him after having seen a 1992 terrific conference³, in which he went through his vision of the future made in Berkeley, talking about autonomous driving, smartphones, and other breakthrough technologies that have been available only decades later. I moved there, despite the restrictions, intrigued by the idea of breathing the campus air and meeting the group in person. I faced the difficulties of travelling during COVID19, but it was worth it, because this experience has encouraged me more in pursuing the dream of graduate school. This research experience had also the meaning of commitment in digging into a topic, machine learning, where at the time of the exam I was not able to perform at my best, despite my passion for it. I am still proud of my achievements, since I am **the first in my family** to study abroad in another language and to earn two masters of science.

UC Berkeley represents for me the land of opportunities that I did not have in my hometown, a place where I could grow, learn and express at the best of my attitudes. Entering in this graduate program from such a background, could also represent a social redemption both for me and the southern Italian youth. Given, among other things, my experiences with people of diverse ethnicity and nationalities gained in my dense journey, I would be the perfect member of the UC Berkeley community.

Matteo Guarrera

¹a three-year additional training course parallel to the traditional study plan

²facebook.com/dronelabtorino

³youtube.com/watch?v=pE9WcW8JAE4