

A distinguishing characteristic of Machine Learning is it incorporates facets from many other fields in Computer Science. This broad encapsulation, as well as the problem domain itself, arouses my interest the most. In particular, I am interested in several machine learning approaches like semi learning and also sparse representation/coding in various tasks including computer vision, and statistical tasks.

As I completed my master's in the major of Computer Engineering with an emphasis on Artificial Intelligence, it is my main goal to continue my education in a more competitive, elite, and international environment. I think I am well prepared for the challenges of studying in the Image and Signal Processing group, Universitat de València due to my extensive academic and practical background, which I will describe in detail below.

My academic experiences thus far have provided me with a wide range of theoretical and practical knowledge and skills that will be immensely useful to study at Ph.D. level. As a graduate student, I excelled in some courses related to machine learning, stochastic processes, numerical optimization, neural networks, and computer vision. It is worth noting I have got my bachelor's degree in the major of Computer Engineering with emphasis on Software at Shahid Rajaee Teacher Training University. With a strong mathematical background, I performed exceptionally in courses concerning calculus, statistics, and probabilistic during the bachelor's degree. After graduation, I found out I deeply enjoyed learning about practical issues as well, besides theoretical courses.

Currently, in addition to my specialized knowledge of computer Engineering, I also focused on computer vision tasks, specifically Automatic Image Annotation. I also have had extensive experience in deep learning since 2017. Besides doing research in the Lab, I have had the opportunity to publish two papers by doing research during my master's. Moreover, I was fortunate to serve as a teaching assistant who saw my interest in some theoretical courses such as digital signal processing, signals and systems, and also stochastic processes during my master's. In addition to the courses that have taken, since early 2020, I have been joined to the Robotics Lab located at the mechanical engineering department in my university. I work as a computer vision engineer and I have to design and develop the waste segregation robot's vision. I have utilized so many different machine learning approaches to handle this part of the project such as object detection, object tracking, transfer learning, and also working with industrial cameras.

Furthermore, I have some work experience with electrical engineers in our Lab to design and develop the control system. As these experiences demonstrate, I am highly motivated in learning new skills and experiencing unraveled things.

This is precisely why I have decided to continue challenging myself by pursuing a PhD at ISP group. I am really interested in several research Topics such as H2020 XAIDA -- Extreme AI for Detection and Attribution and ERC Synergy Grant USMILE. I also would like to expand my knowledge on Remote Sensing Area as well.