

Dear recruiting team,

I am a Machine Learning engineer with a strong background in software development. I have professional experience in computer vision, motion forecasting, transformers, and graph neural networks (GNN). Additionally, I have academic experience in other areas such as natural language processing (NLP) and advanced optimization. Currently, I am conducting research on multimodal pedestrian trajectory prediction at Stellantis.

Regarding my professional experience in computer vision, I worked as a freelance computer vision engineer for a startup for two months. During this time, I successfully reduced the inference time of the vehicle detection algorithm by 60% with a loss of accuracy below 4%. I also created a benchmark pipeline for automated evaluation and implemented an initial version of the night-time detection algorithm. These results demonstrated my ability to apply my skills effectively in this field. Furthermore, in 2022, I participated in a computer vision-focused hackathon organized by HEC and Institut Polytechnique de Paris, where my team achieved the first-place position for having the most performant model.

I hold a master's degree in artificial intelligence from the University of Paris-Saclay, where I had the opportunity to work with renowned researchers such as Isabelle Guyon and François Yvon, from whom I learned a great deal. I also conducted research during an internship at CNRS, where I worked on diffusion-based content generation for augmented reality. Over the past five years, I have had the privilege to lead and contribute to several projects in the field of machine learning, as well as software development in general.

For more information about my profile, please feel free to contact me directly or visit my website at [www.mashra.fr](http://www.mashra.fr).

Thank you for considering my application. I look forward to your response and remain at your disposal.

Yours sincerely,

Marwan Mashra