My name is Luca Trautmann, and I would like to express my motivation to pursue the summer school in Artificial Intelligence and Machine Learning at Oxford.

My interest in Artificial Intelligence has its origin in my deep-rooted curiosity about the capabilities of artificial intelligence but also my concerns about societal cohesion in the age of AI. In my previous studies at the University of Groningen, I focused on courses and projects related to attention and cognition and their intersection with modern information technology. In my honours thesis project, I explored the effects of digital technology on flow experiences - a proxy for meaningfulness in life. The research around the project kindled my interest in Artificial Intelligence. Today, I am especially interested in generative adversarial networks, image recognition, natural language processing, and all three's capabilities to develop synthetic media such as deepfakes. I am worried that advances in all three will be hazardous to interpersonal relationships and societal cohesion more generally. As such, I want to be an expert in Artificial Intelligence because I believe that we can only make a difference if we have a fundamental understanding of the subject matter at hand.

I also want to talk honestly about my current level of education in mathematics and coding. I graduated in Psychology with an honours degree from the University of Groningen in 2021. Within the program, I have enjoyed a thorough education in statistics that ranged from classical frequentist statistics (NHST, ANOVA, generalised linear regression modeling) to Bayesian approaches. At my former alma mater, I have mainly used SPSS and R in data analyses and project work. Currently, I am a student at the University of Amsterdam as part of a pre-master program in psychological methodology. Here, I have successfully completed courses in mathematics (calculus and matrix algebra) and statistics and programming in R. In July, I will have also completed courses in multivariate statistics and machine learning, and Bayesian statistics. In September 2022, I will be a graduate student at the University of Sussex in their Artificial Intelligence and Adaptive Systems program.

Prior to my education in the Netherlands, I was a student in the Biology department at the Ludwig-Maximilian-University in Munich. During my time at the university, I completed mathematics courses (linear differential equations were the most sophisticated concepts in the curriculum). I also have some personal experience in python. To summarise, I have a relatively broad background in statistics and mathematics, and I know how to write code to analyze and explore data. However, I am not a mathematician by training, and I am aware that I still have deficits that I will work on until the program starts in September.

My prior experiences motivate my application today. Fundamentally, I want to learn more about artificial intelligence because it is the most exciting and promising development area in the 21st century. While AI applications are exciting, it is also essential to understand the context (e.g., psychological) in which these systems are developed and deployed. I, therefore, believe that my unorthodox background is also an advantage, and I want to enrich the community with my experiences and knowledge.

I am looking forward to becoming a part of the summer school program, and I hope that I have convinced you to invest in me as a student.

Thank you for considering my application. I am looking forward to hearing from you.

Most sincerely,

Luca Trautmann

Amsterdam, 03.06.22