**Introduction**

This report is a literature review of existing research for this MSc project. It focuses on both the neurobiological aspects of cognition and memory, as well as the computational methods that are used to study these facts. Studies on the brain and the nervous system have been carried out for more than a thousand years, but never has the pace of growth of neuroscience been as fast and as full of depth as it is now, due to the advent of computers and modern technology. Computers have allowed us to manage, analyse and simulate large amounts of data, in a way that was previously not possible.