

# Assignment 4

## AI in acupuncture

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Acupuncture is a component of traditional Chinese medicine which involves the insertion of thin needles into the skin at multiple, varying locations based on the patient's symptoms. It is believed that the practice and theories of acupuncture is not based on scientific knowledge and hence it is considered a pseudoscience by researchers.

There are several ways AI can be used to gather facts and data around acupuncture. For example, Traditional Chinese medicine or TCM practitioners use a concept called Syndrome which is an abstraction of a variety of signs and symptoms. They perform syndrome differentiation as well as biomedical disease diagnosis before a treatment decision like the placement of acupuncture needles is made. Tools like knowledge mapping technology can be used to build database for the TCM-associated clinical diagnosis and treatment outcomes while also analyzing the data of its curative effects.

Neural network models can be used to predict diseases and compare them with one of the 187 diseases listed in TCM. The controversy around safety of acupuncture can be rebutted by using AI to make robots that controls acupuncture and AI-guided automatic detection of therapeutic efficacy of acupuncture point stimulation. Hence , combining acupuncture with modern technologies like AI can help acupuncture to be considered as a scientific method of treatment.