Detecting Fake News in Social Media using Bio-Inspired Algorithms and Deep Learning

Fake news has an immense impact on our modern society. Since the 2016 USA presidential election, awareness of fake news has soared. Detecting and preventing the spread of unreliable media content is difficult, especially given the rate at which news can spread online. The rumours brought by fake news can have a serious negative impact on national security and society. **This project is concerned with identifying fake images in social media using bio-inspired machine learning techniques.**

Arguably the hardest part of making your own machine learning model for identifying fake news/images is gathering the training data. Several recent advances in machine learning or deep learning techniques can be perfect options for creating testing data. In the first part of the project, we will study and implement one of the recently developed deep learning techniques to create suitable test images for training our model.

Bio-inspired algorithms are an emerging approach based on the principles and inspiration of the biological evolution of nature to develop new and robust competing techniques. Bio-inspired algorithms are recognized in machine learning to address optimal solutions to complex problems in science and engineering in the last years. In the second part of the project, we will study and implement one of the recent Bio-Inspired Algorithms to identify fake news.

Required Skills: Background in artificial intelligence and machine learning techniques, Knowledge on Bio-inspired Algorithms, Experience on implementing ML techniques using Python.