Using AI to detect fake smiles in prison interviews to help reveal potential deception

The prison system strongly relies on trained human officers when they conduct interviews with prisoners to collect information regarding the inmate behaviour and crime that was committed. In order to get a better understanding within prison interviews, support could be provided to prison officers around identifying deceptive behaviour which could indicate significant potential risks.

Aim

This proposal is created to develop code which involves an Artificial Intelligence library which would be used to detect fake smiles when prisoners are having their interviews at the station. This would support the expertise of trained officers without replacing their judgement but instead provide assistance in the form of additional technology.

Objectives

- Develop a code using a software called Visual Studios which would be able to analyse prisoner's faces during interview to detect fake smiles in real-time as well as after
- Design a functional user-friendly interface to support prison officers in effectively using the AI during and after interviews
- The recording system must be able to integrate into existing computers
- Ensure that the software is in compliance with the UK Gov laws meeting the standards of privacy for HMP security prison

Methodology:

- Development: Using code with inbuilt algorithms of machine learning in order to train the Visual Studio's code to run a dataset found online which would contain multiple individuals focusing on real and fake smiles
- Training And testing: The code would be put into testing to determine the accuracy level and also test the usability by running simulated tests within a controlled environment such as a classroom school setting.
- Ethical Compliance: The main concern is that the purpose of the technology is ethically acceptable in its usage. Working with a prison population raises issues around consent and it is important the privacy and confidentiality of prisoners is complied with.

Key Considerations

- **User-Friendly Interface:** The interface should be simple and easy to use
- **Compatibility:** Ensure that the system is compatible wit the computers in prisons
- **Real-Time Analysis:** Explore different ranges of systems that are compatible with real time system
- **Training testing:** Testing to be conducted on people who are unfamiliar with computer systems and AI.
- **Adaptability:** AI tool should be fully adaptable to different interview scenarios and personalities. The image data set used must be tested and trained to avoid bias.
- **Privacy and Confidentiality:** Ensure that the use of this tool complies with privacy regulations and maintains confidentiality.