

AI in Orthopaedics: Team Information

December 8, 2024

Team Members and Contributions

Tsz Shun Max Chang (Team Lead)

- Research on appropriate machine learning models to use for the given dataset
- Developed and implemented the machine learning models
- Performed data analysis on ML model results
- Writeup on code documentation and installation requirements

Wang Yui Henry To

- Communication between the different roles, ensuring understanding of the relevant information for all team members
- Writeup of the model used and documentation of the steps in model development
- Basic statistical interpretation and analysis of results
- Researching alternative considerations to our mode, documenting potential improvements and future considerations
- Collation of everyone's work and the integration in a single report

Mohammed Jafer Ali

- I helped with the analysis and teaching of herniated disc and Spondylolisthesis.
- I discussed with orthopaedic spinal surgeons and tech innovators at a Medical Conference at Google HQ about how best to implement this algorithm into clinical pathways based on their experiences to gain understanding. Discussed with orthopaedic surgeons involved in creating surgical hubs and how our AI can assist in this.
- Wrote the 3.3 Clinical Implementation section in the report.
- I also proof read all parts parts of the final report and fact-checked any medical-related issues and statistics.

Sukhraj Virdee

- Provided a narrative on how the variables, angles and parameters are important in detecting herniated discs and spondylolisthesis
- With partial reference to its implementation in a clinical setting, including the potential of machine learning's role
- Provided suggestions / ideas on how to measure and set thresholds for the code