Propositions accompanying the thesis

I See Through... You

Augmented Reality Surgical Navigation: Alignment and 3D Perception

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1. Augmented reality can be used as a non-invasive surgical navigation tool. (*chapter 6*)
2. A perfect image-to-patient alignment in augmented reality does not imply a perfect surgical outcome. (*chapter 5*)
3. Instrument tracking and visualization are a pre-requisite for accurate augmented reality guidance in surgical tasks. (*chapter 5*)
4. Synthetic data generation helps exploring solutions to tasks that would otherwise remain unsolved. (*chapter 4*)
5. Adequate 3D visualization technologies help users perform better in navigation tasks compared to 2D ones. (*chapter 6*)
6. Augmented reality to an expert surgeon is a magnifying glass to a microscope.
7. In a world that is increasingly connected, 6G can provide one of the main necessary blocks towards enabling tele-surgery.
8. Unlike ChatGPT, the human mind efficiently operates with small amounts of information. — Noam Chomsky.
9. The knowledge of anything, since all things have causes, is not acquired or complete unless it is known by its causes. — Ibn sina (Avicenna)
10. If you think the occurrence of an event is random, it is not. Spare us the intellectual laziness and find the right reasons as to how and why that happened.
11. A candle never loses any of its light while lighting up another candle. — Jalal Ad-din Rumi