

## Harmonized steps

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Propositions accompanying the PhD-thesis

Harmonized Steps:  
Orchestrating Healthcare Transformation  
with Natural Language Processing

Sander Puts

Wednesday, December 11<sup>th</sup> 2024, 16:00 hours

1. AI should be allowed to support and oversee the healthcare professional's actions, while simultaneously ensuring the healthcare professional supervises the AI. *(this thesis)*
2. The quality and specificity of annotated data are crucial for the success of NLP in clinical contexts, necessitating the indispensable role of medical experts in the annotation process and system development. *(this thesis)*
3. The integration of AI co-pilots in healthcare should focus on enhancing human-AI interaction with active medical expert involvement, rather than pursuing fully autonomous systems, to ensure reliability and acceptance in clinical practice. *(this thesis)*
4. The scarcity of large, well-annotated, open-source clinical datasets limits the development and generalizability of NLP models in healthcare, emphasizing the need for collaborative efforts to create diverse and high-quality datasets. *(this thesis)*
5. The adoption of AI in healthcare not only supports administrative efficiency but also enhances patient care by improving data quality and enabling better clinical decision-making. *(this thesis)*
6. NLP's ImageNet moment has arrived. *(Sebastian Ruder, 2018)*
7. AGI could surpass human intelligence and profoundly transform every aspect of life. *(Ilya Sutskever)*
8. A system trained on language alone will never approximate human intelligence, even if trained from now until the heat death of the universe. *(Jacob Browning)*
9. Everything should be made as simple as possible, but not simpler. *(Albert Einstein)*
10. To me, ideas are worth nothing unless executed. They are just a multiplier. Execution is worth millions. *(Steve Jobs)*
11. Nothing is more powerful than an idea whose time has come. *(Victor Hugo)*