Master of Science – Biomedical Engineering, Thesis Proposal
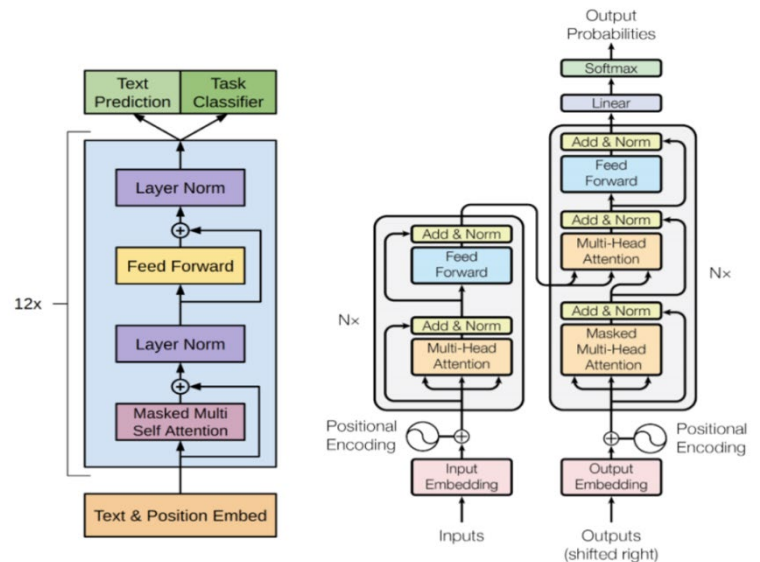
Large Language Model Approach for Analyzing Medical Information on the Internet

It has become increasingly common for patients to turn to the internet to gather information about their medical conditions, including potential surgical interventions. However, many websites providing medical information can contain false or misleading information, which can be dangerous for patients. It's crucial for patients to carefully analyze the quality of the websites they are using and to verify the accuracy of the information they find before making any decisions about their health.

The goal of this master's thesis is to utilize Large Language Models (LLM) that can accurately rank the information found on websites providing medical information. The model will be trained on datasets of medical texts to ensure its effectiveness and finetuned with the respective ranks which got labelled by physicians. The thesis aims to create a tool that can help patients more easily access accurate medical information and make more informed decisions about their health and to check how well the model performs to manual segmented data.

Nature of the Thesis
Programming: 80%, Documentation: 20%

Specific Requirements
- Experience in machine learning
- Good programming skills (especially Python)

Supervisors
Vincent Ochs (PhD student), *University of Basel, Center for medical Image Analysis and Navigation (CIAN)*
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