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**ActuaryGPT: Applications of Large Language Models to Insurance and Actuarial Work**

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Speaker/Company

**Caesar Balona, Old Mutual Insure**

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Abstract

Recent advances in large language models (LLMs), such as GPT-4, have spurred interest in their potential applications across various fields, including actuarial work. This presentation highlights key details from the underlying paper which introduces the use of LLMs in actuarial and insurance-related tasks, both as direct contributors to actuarial modeling and as workflow assistants. It provides an overview of LLM concepts and their potential applications in actuarial science and insurance, examining specific areas where LLMs can be beneficial, including a detailed assessment of the claims process. Case studies with accompanying code showcase the potential of LLMs to enhance actuarial work. Overall, the presentation aims to convey that LLMs can be valuable tools for actuarial tasks involving natural language processing or structuring unstructured data, and as workflow and coding assistants. However, their use in actuarial work also presents challenges, particularly regarding professionalism and ethics, for which high-level guidance is provided.

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Biography

Caesar is a qualified actuary with a keen interest in modernizing actuarial workflows and researching applications of data science, computer science, and artificial intelligence in actuarial work. His current role is at Old Mutual Insure, where he leads the catastrophe and climate modeling initiative. In his prior role, Caesar headed the data science team at QED Actuaries & Consultants, consulting on the intersection of traditional actuarial work and data science. He also runs ModernActuary.co.za, where he sporadically posts his thoughts and insights.

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