

RETROSPECTIVES AND PERSPECTIVES OF THE USE OF ARTIFICIAL INTELLIGENCE IN ACADEMIC RESEARCH IN GEOLOGY AT UNISINOS

Ariane Santos da Silveira¹, Luciano Garim Garcia²
José Manuel de Oliveira³, Gabriel de Oliveira Ramos⁴, Sandro Rigo⁵

¹Universidade do Vale do Rio dos Sinos (ariane@unisinis.br)

²Universidade do Vale do Rio dos Sinos (josem@unisinis.br)

³Universidade do Vale do Rio dos Sinos (lucianogarim@unisinis.br)

⁴Universidade do Vale do Rio dos Sinos (gdoramos@unisinis.br)

⁵Universidade do Vale do Rio dos Sinos (rigo@unisinis.br)

In this presentation, we will succinctly outline the academic research journey in Geology at the Universidade do Vale do Rio dos Sinos (UNISINOS), from the early research and development projects to the integration of studies that employ and enhance artificial intelligence (AI) models. We will briefly showcase some recent studies conducted by the Núcleo de Modelagem Geológica e Numérica (MGEN), encompassing areas such as predictive modeling in petrophysics and the manipulation of seismic data to enhance its interpretation. Lastly, we will discuss future perspectives of AI research in Geology, exploring promising paths and potential applications in future works to be developed by MGEN.

KEYWORDS: ARTIFICIAL INTELLIGENCE, GEOLOGY, UNISINOS