

WORKSHOP: Generative AI in Geoscience Workshop

Date: Thursday 20 November 2025

Venue: The Auditorium, 33 Charlotte St, Brisbane (*same venue as conference*)

Time: 9:15am to 12:30pm

Agenda

9.15 am Welcome and Introduction

9:20 am Session 1: Introduction to Generative AI in Geoscience

- How LLMs work and what is available
- Domain-specific models versus general models
- What you can achieve today

9:50 am Session 2: Applications of Generative AI in Geoscience

- The technology evolution: how did we get here?
- Technical landscape
- Practical implementation showcasing GSQ use cases:
 - Vocabulary management
 - Metadata repair
 - Digital Librarian tool

10:30 am Morning Tea

10:45 am Session 3: Hands-On Prompting Workshop

- How to write effective prompts
- Prompting workshop
- Explore the potential for a GSQ LLM Prompt Library

11:20 am Session 4: Future Directions and Data Quality

- GSQ's roadmap for Generative AI
- The role of data quality and industry reporting in enabling AI use cases
- Connecting Generative AI to Geoscience Data

12:00 pm Session 5: Interactive Industry Session

- Insights from industry feedback and survey results
- Collaborative discussion on tool requirements and use cases
- Establishing a reference group and next steps

12:20 pm Questions and Closing

This workshop is ideal for geoscientists, mining engineers, data scientists, data managers, and decision-makers working with geoscience data in Queensland's mining and resources sector.

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