

# Harrison Button

He/Him

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🐙 github.com/harrbutt

## EXPERIENCE

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### • Rio Tinto Exploration

Geodata Scientist - Analyst II

Jan. 2023 – Present

- Deploy machine learning model pipelines in production environments using Docker and AWS.
- Scale-up internal R&D projects, unlocking new capabilities in geophysical, geochemical, and mineralogical modelling for target generation and prioritization.
- Full-stack development of various data science apps, including automating CI/CD routine using GitHub Actions, integrating Databricks, and contributing to Python libraries for company-wide knowledge share.
- Help manage a Posit Connect server with over 100 users from the regional exploration teams.

Geodata Scientist - Analyst I

Aug. 2021 – Dec. 2022

- Implemented machine learning methods for ore-body knowledge and target generation in global exploration contexts using Python and R.
- Automated GIS workflows using ArcPy and wrote custom Excel macros using VBA, saving hours of manual work per month.
- Produced and maintained multiple internal and external data science apps, built using Dash, Streamlit, and R Shiny.

Vacation Student, Geophysics - Technician III

Nov. 2020 – Aug. 2021

- Completed routine analysis of geophysical, geochemical, and petrophysical data for target generation in the Mt Isa and Pilbara regions.
- Compiled both project and state-wide data sets across Australia.
- Supervised airborne and ground geophysical surveys undertaken by geophysical contractors.

### • The University of Queensland

Tutor, School of Mathematics and Physics

Jul. 2017 – Nov. 2020

- Tutored a wide range of introductory and advanced courses to specialist and non-specialist students. Select courses include DATA7202 "Statistical Methods for Data Science", STAT3006 "Statistical Learning", and STAT3500 "Problems and Applications in Modern Statistics".

## EDUCATION

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### • The University of Western Australia

Graduate Certificate in Data Science

Jul. 2022 – Sep. 2023

### • The University of Queensland

Bachelor of Science (Honours) in Exploration Geophysics

Feb. 2019 – Nov. 2020

Bachelor of Mathematics / Science in Statistics and Geological Sciences (Extended)

Feb. 2014 – Nov. 2018

## SKILLS

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- **Programming:** Python, R,  $\text{\LaTeX}$ , SQL.
- **Software:** AWS, Docker, Git, GitHub Actions, Jira, Databricks, Jira/Confluence, Posit Connect, Linux.
- **Geoscientific software:** Oasis Montaj, ioGas, ModelVision, Geoscience Analyst, ArcGIS Pro (including ArcPy).

## PROFESSIONAL MEMBERSHIPS

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- **Australian Society of Exploration Geophysicists:** Member
- **Australian Institute of Geoscientists:** Graduate Member

## HOBBIES

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- Playing and seeing live music; collecting vinyl records; tinkering with computers; stationery; reading manga.