Harrison Button

He/Him

EXPERIENCE

• Rio Tinto Exploration

Geodata Scientist - Analyst II

Jan. 2023 - Present

- Utilized Docker and AWS cloud computing services to scale-up internal R&D projects, unlocking new capabilities in large-scale geophysical modelling for target generation and prioritization.
- Contributed to the full stack development of an image similarity application, including custom geoscientific visualizations and automated CI/CD through GitHub Actions.
- Helped manage an internal Posit Connect server with over 100 users from the regional exploration teams, and also provided general R expertise to citizen data scientists throughout the entire Rio Tinto company.

Geodata Scientist - Analyst I

Aug. 2021 – Dec. 2022

- Implemented recently published machine learning methods for ore-body knowledge and target generation in global exploration contexts.
- Automated GIS workflows and forward-looking economic simulations, saving hours of manual work per month.
- Collaborated with internal and external partners to produce data science products and applications for a global user base.

Vacation Student - Geophysics

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

• 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 Bachelor of Mathematics / Science in Statistics and Geological Sciences (Extended) Feb. 2019 – Nov. 2020 Feb. 2014 – Nov. 2018

SKILLS

- Programming: Python, R, LATEX, Fortran, Matlab, VBA, SQL, C.
- Geoscientific Software: Oasis Montaj, ioGas, ModelVision, Geoscience Analyst, ArcGIS Pro (including ArcPy).
- Other: AWS, Dash, Git, Jira, R Shiny, Posit Connect, Linux, Microsoft Excel.

Professional Memberships

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

Hobbies

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