

Dr Adam Banham

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Brisbane, Australia

SUMMARY

I am an experienced **data and software engineer with several years of experience working with large datasets**, drawing on my industry experience and doctoral studies. My expertise also encompasses building pipelines for both academic and commercial purposes. I help businesses develop their enterprise systems to capture process knowledge of their daily operations.

EXPERIENCE

Queensland University of Technology (QUT)

Feb 2019 – Present

Sessional Academic / Head Tutor

- Teaching both undergraduate and postgraduate students in computer science and information systems.

Queensland University of Technology

Feb 2021 – Dec 2024

Doctoral Student / Researcher

- Performed research in the field of **process mining**, which is an applied computer science and data science discipline focusing on empowering businesses through their historical data stored in information systems.
- Contributed new techniques for rediscovering the decision making within processes, where the decision making could be influenced by temporal data stored externally from the source process.
- Convert complex data structures from formal computer science into usable software for application in real-world situations. Working with **publically available medical data sets, like MIMIC III/ IV** and with practitioners to perform research into understanding historical patient cohorts.

Queensland University of Technology

2021 – 2022, 2023 – 2024

Process Consultant / Data Analyst

- **Planned, managed, and actioned several industry projects to completion**, supporting the partner's enterprise systems and empowering their process knowledge of daily operations.
- Extracted enterprise data from the host organisation, designing data solutions to convert complex business data into meaningful insights.
- **Using business process management (BPM) tools and technologies**, integrating academic applications into real-world applications. Ran workshops to embed BPM within the organisation.

PETRA Data Science

Nov 2019 – Feb 2021

Data Scientist / Full Stack Developer

- **Developed a data management system** for collecting data from clients, storing and processing capacities, and providing prescriptive machine learning on supplied data in real-time.
- **Developed a web application to support the accessibility** of the underlying data management system, managed product development cycles, and delivered a full product release from a prototype phase in a timely manner.

EDUCATION

Queensland University of Technology

Feb 2021 – May 2025

Doctor of Philosophy – *Process Mining with Exogenous Data*

Supervisors: *Prof Moe T. Wynn, Dr Robert Andrews, Prof Sander J. J. Leemans*

Disciplines: Computer Science, Information Systems, Data Science

Produced four high-quality publications in top venues during the candidature.

Queensland University of Technology
Bachelor of Information Technology (Honours)
Supervisors: *Prof Sander J. J. Leemans, Dr Robert Andrews*

Feb 2018 – Feb 2021

GPA: 6.375/7

SKILLS

Development: Python, Java, Javascript, Typescript, Rust, Amazon Web Services, SQL

Modelling: BPMN 2.0, Petri nets, Transition Systems, ORM, UML, ER

Technologies: Machine Learning, Big Data Analytics, Deep Learning, Formal Computer Science, Conceptual Modelling, Process Mining, Business Process Management, Database Management, Modern Web Development

AWARDS

Advanced Research Opportunities Program Fellowship **2024**
Competitive grant for short-term research visit with RWTH Aachen, Germany

Best Sessional Accomplishment and Outstanding Presentation Awards **2023**
Queensland University of Technology and Doctoral Consortium, School of Information Systems, QUT

United Nations Hackathon **2022**
Best Regional Team with Centre of Data Science, QUT
research.qut.edu.au/qutcds/2023/02/10/un-hackathon