

Melbourne Data Analytics Platform (MDAP)



THE UNIVERSITY OF
MELBOURNE

A team of academics enabling data-intensive and collaborative research across the University of Melbourne



Edoardo Tescari

Senior Research Data Specialist

Melbourne Data Analytics Platform



**COLLABORATION
COMPUTING
RESEARCH IMPACT**

MDAP was formed in **2019** as part of the Petascale Campus (now Digital Research) Initiative: a comprehensive, **academic-led plan** to accelerate the University's capacity for **data-intensive research**



The Team

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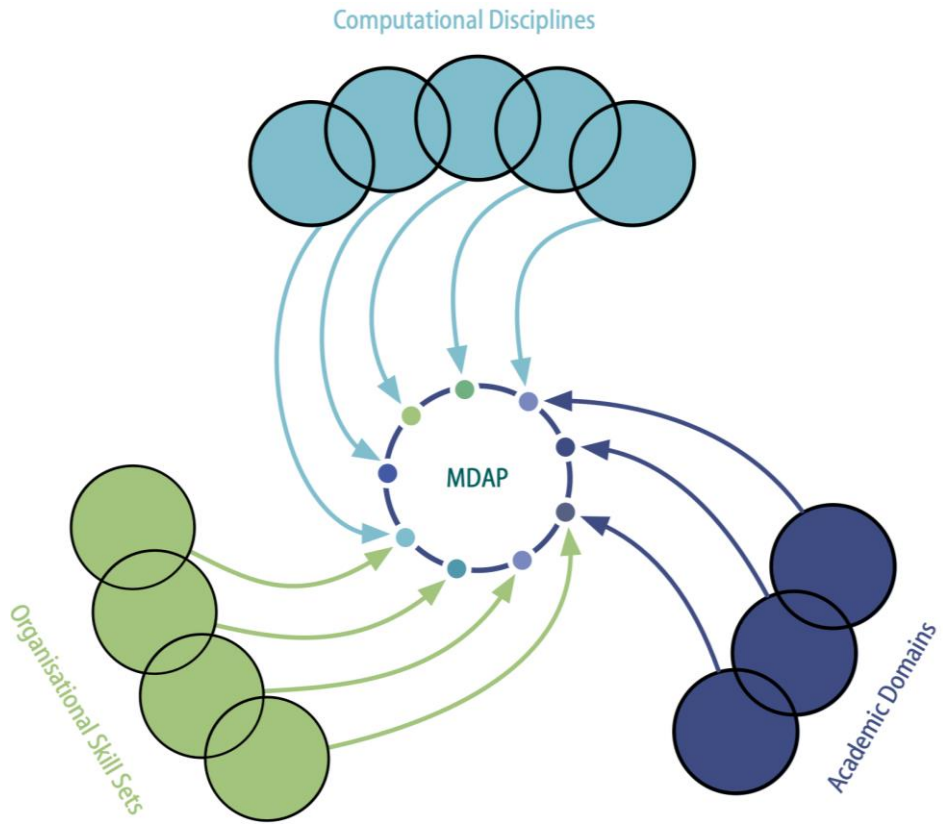


MDAP is a team of 20 research data specialists enabling data-led research across disciplines at UoM

- Supported **160+ collaborative research projects** across all Faculties
- ...and many more researchers via **consultation, outreach events and training**



The Team



+ Interns

Research Data Specialist expertise



HIGH
PERFORMANCE AND
CLOUD COMPUTING



NATURAL
LANGUAGE
PROCESSING



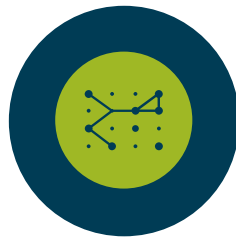
MACHINE LEARNING



COMPUTING
INFRASTRUCTURE



DATA ANALYSIS



DATA STEWARDSHIP

Plus

- Data management, curation and wrangling
- Software development and pipeline management
- Image processing
- Virtual/augmented reality
- Visualisation
- Web development

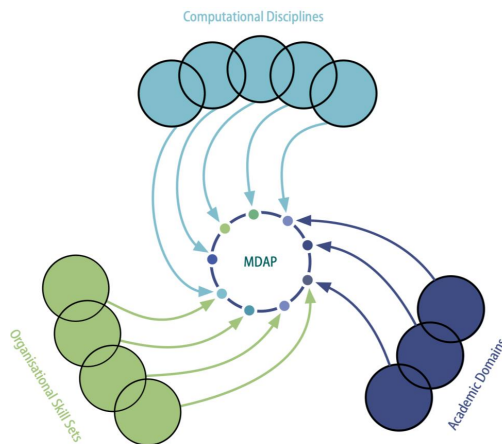
and more...

Academic Specialists



UoM work focus categories = 4 groups of academic positions based on specific duties, focus & emphasis:

- Education and Research
 - Education focussed
 - Research focussed
- Academic Specialists



Benchmarks

Education – Research
& Research Training –
Leadership and Service

MDAP innovative working model



- MDAP is an **academic unit** and Research Data Specialists collaborate with Academics as peers
- Various discipline and digital method expertise = **research in new, cross disciplinary directions**
- Provide **intellectual** and **technical** input
- MDAP work as a **collective**
- **Unique** nationally and internationally



Engage with us

Faculty supported
collaborations

- Annual call
- Projects lasting 3-9 months
- High strategic value
- Merit based allocation



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NEW! 57 letters of intent received
from researchers across all 9
Faculties for 2025 collaborations



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Researcher funded
engagements

- Wide range of projects, time frames and engagement modes
- Open year round
- Include support of grant applications



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Advice and short projects

- Consultancy-style advice
- Open year round
- Free or at cost-recovery rates depending on scope of project



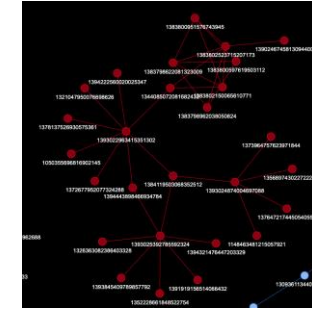
What does working with MDAP look like?



Explore causality in complex dynamical systems: implementing core algorithms in a distributed computing environment



Employ computer vision and AI to analyse a large image database for emergent patterns and notable anomalies



Social media disinformation and the Papua conflict: identify coordinated activity in tweets related to the Papua conflict and visualise it

We work on a range of projects from **across all disciplines** at UoM

We can also **redirect researchers** to other platforms and groups who might be better suited to advance their research

University of Melbourne Research Platforms

<https://research.unimelb.edu.au/facilities/infrastructure>



- Asset value >\$200M
- Operations \$40-50M per year
- 12,000 square meters of University space
- Work force of ~180FTE

Source: Lauren Hyde, Associate Director Research Infrastructure

Opportunities



A TEAM OF **ACADEMICS** 😊

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- The support **model really works** = we speak the language of researchers and understand the digital research infrastructure landscape
- **Growing demand** for engagement
- Inherent **cross / multi / inter disciplinary** approach to tackle research problems
- MDAP's **unique structure and working model** allow the team to respond efficiently to the demands of the ever-changing data-intensive research environment
- **Workforce retention**
- **Career development and progression** of Academic Specialists: since 2022, 8 colleagues have been promoted to level C (2 of them did not hold a PhD)

Challenges



A TEAM OF ACADEMICS 🙄

Challenges



A TEAM OF ACADEMICS 😞

- Research Data Specialists have a large variety of **career trajectories** = fair and equitable assessment of career performance, development and progression?
- Limited control over the production of **scholarly outputs** = contribution during a project vs impact enabled by and resulting from this contribution
- **Non-traditional research outputs** = a framework to properly capture this range of outputs and evidence impact is currently missing
- Individual **academic development** can be challenging, given the constraints of our operational model
- **Recognition** of Academic Specialists

Building a data-intensive community of practice



Our growing community of practice supports researchers, academics and third-spacers to:

- Share **knowledge** and resources
- **Develop skills** and research capacity
- Share career progression, funding and other **opportunities**
- Develop **connections** and collaborate across disciplines

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The eResearch Support Space is tricky

We are planning some events for 2025 and are keen to engage with different institutions & organisations... please feel free to come and talk to me afterwards!

Thank you

Edoardo Tescari (MDAP)



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MELBOURNE
DATA ANALYTICS
PLATFORM

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