Plan Overview

A Data Management Plan created using DMPMelbourne

Title: ARC Training Centre in Optimisation Technologies, Integrated Methodologies, and Applications (OPTIMA)

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Funder: Australian Research Council

Template: Australian Research Council Data Management Template 2021

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Project abstract:

OPTIMA's mission is to deliver Industrial transformation via increased uptake of trusted and sophisticated optimisation technologies. This mission addresses industry's urgent need for decision-making tools for global competitiveness: reducing lead times, and financial and environmental costs, while improving efficiency, quality, and agility. Despite strong expertise in academia, industry is yet to fully benefit from optimisation technology due to its high barrier to entry.

By connecting industry partners with world-leading interdisciplinary researchers and talented students, OPTIMA's goal is to advance an industry-ready optimisation toolkit, while training a new generation of industry practitioners and over 120 young researchers, vanguarding a highly skilled workforce of change agents for transformation of the advanced manufacturing, energy resources, and critical infrastructure sectors.

The OPTIMA team spans operations research, computer science, statistics and probability, economics, and engineering. Integration of the approaches developed by each contributing discipline is a core focus of the Centre. These interdisciplinary efforts will produce powerful new optimisation methods and apply them to varied application domains in industry.

OPTIMA's research and training programmes will prioritise industry-driven needs, underpinned by global best practice and cutting-edge research innovations. In so doing, OPTIMA will create a lasting legacy of industrial transformation in both technological and workforce capability

The overarching goal is advancing an industry-ready optimisation toolkit, while training a new generation of industry practitioners and over 120 young researchers, who will vanguard a highly skilled workforce of change agents for industrial transformation.

The Strategic Priorities are Research, Education and Training and Transformation.

ID: 1751

Start date: 23-09-2021

End date: 22-09-2026

Last modified: 25-02-2022

Grant number / URL: https://www.arc.gov.au/grants/linkage-program/industrial-transformation-research-program/industrial-transformation-training-centres

ARC Training Centre in Optimisation Technologies, Integrated Methodologies, and Applications (OPTIMA)

Overview

Expected project start date (DD-MM-YYYY)

23/09/2021

Expected project duration.

- 5 years

Have you applied for or received ethics approval?

- No

Data Ownership

Will any of the following apply to your research data?
Please indicate all that apply

- Research conducted by graduate researchers
- Collaborations with external parties
- Legal agreements from data providers (e.g. licensing, conditions of use)

Are there any research agreements regarding data ownership in place?

- Yes

Describe your data ownership arrangements

All IP and data ownership is listed in the Project Plans drawn up by RIC and UoM Legal on behalf of OPTIMA and our Industry Partners.

Data Storage

What type of research data and records will you be generating or storing?

Open-source computer code, commercial-in-confidence computer code, data sets (some of which are subject to confidentiality as per project agreements). Video files.

Will you store your digital research data and records on University-provided systems?

- Yes

Please indicate all University systems you will use to store your research data.

- Spartan/HPC Storage
- OneDrive/Sharepoint
- Shared drive

Will the project generate physical research materials or paper-based records?

- No

Data Security

Will the data in the research project fall into any of the following categories?
Please indicate all that apply

- Commercial-in-confidence data
- Personal information regarding individuals (e.g. identifiable details, photos, audio recordings, video recordings)

What safeguards and security features will protect data from unintended access?

We have partners that have secure data. In these cases in the Project Agreement we stipulate where this data will be managed. In most cases, secure data is handled onsite with the industry partner or on a industry partner supplied machine, otherwise we use dummy data sets. Personal information collected will be stored on Sharepoint and shared only with the ARC as per our Partnership Agreement. Personal data shared with our OPTIMA members will be presented in tables and graphs without identifying individuals and providing no names, ages etc.

Data Retention

Will your research data fall into any of the following categories?

- None of the above (Retain for 5 years)
- Data of high community significance or heritage value to the state or nation (Retain permanently)
- Data that is costly or impossible to reproduce (Retain permanently)

How will you retain your data for the required retention period?

Data will be retained by the OPTIMA Centre Manager on Sharepoint. Data collected by our Researchers will be retained on SharePoint at University of Melbourne or Google Drive for our Monash members.

Data Publication

Will you make your data available for re-use by others?

- Yes

How will your make your data available for re-use?

- Disciplinary repository (please indicate details below)
- UoM Figshare
- Custom website or server
- Other (please indicate below)

GitHub
MATILDA (matilda.unimelb.edu.au)

Are there any restrictions (e.g. legal or ethical obligations) to making the data available for re-use?

- Yes

Please describe what restrictions are in place.

We have IP agreements in place with our industry partners - we will use these to guide our decisions on making the data available.