



AUNZ AI4LAM - Research Challenge
Ingrid Mason, Alexis Tindall & Adam Moriarty
eResearch New Zealand 2021 conference

NZ & AU chapter of AI4LAM

- AI4LAM
- AU & NZ regional chapter
- Research challenges
- Data and collaboration challenges
- Motivation
- Ethos
- Approach
- Join us



AI4LAM

Artificial Intelligence for Libraries, Archives & Museums

AI4LAM is an international, participatory community focused on advancing the use of artificial intelligence in, for and by libraries, archives and museums.

Next open community call is on February 16 2021 with Lightning talks on Named Entity Recognition

Corona: Futurs Fantastiques 2020 in Paris is postponed until December 8-11 2021!

NZ & AU chapter



Presenters: Adam Moriarty, Ingrid Mason, Alexis Tindall

AU & NZ AI4LAM chapter and coordination

Global community - working groups and ML & models e.g. [data & NLP model](#)

Chapter set up in 2020

- [Charter](#) - we care about culture, ethics, literacy and the role of AI in society
- Coordinator/leaders and volunteers

Chapter focus

- Projects - showcasing/sharing ideas
- Literacy - knowledge and capability building
- [Talks](#) - regional and international speakers

Register

- Next up on 24 Feb 2021: [Can we trust machines?](#) By Meena Tharmarajah, Wriveted.com and Georgina Ibarra, CSIRO Data61

Community coordination

- Ingrid Mason, (soon) ANU
- Alexis Tindall, Uni Adelaide Library
- Adam Moriarty, Auckland Memorial Museum
- Katherine Jarvie, RMIT Library
- Noriaki Sato, Monash Uni Library
- Dr Jason Ensor, Western Sydney Uni Library
- Paula Bray, State Library NSW
- Dr Sydney Shep, Victoria Uni Wellington
- Liz Stokes, Aus Research Data Commons

Our shared challenge

He aha te mea nui o te ao

What is the most important thing in the world?

He tangata, he tangata, he tangata

It is the people, it is the people, it is the people

Interdisciplinary research challenge

Protocols that respect indigenous rights and data sovereignty

Use of 5 Safes model and community led research partnerships

Train/test datasets built with our cultural and language collections

ML models built that permit us to look deeply into our heritage

Data science that confronts bias, elision, and uncertainty in data

ML models that co-evolve with our cultures and languages

Interdisciplinary collaboration that generates new knowledge

Data and collaboration challenge - Alexis



Data and collaboration challenge - Alexis

Cultural collecting organisations - WE HAVE A LOT OF DATA!

Multimedia - publications, web archives, software, e-resources, art

Our collections complex, reflect many peoples, cultures and biases

Stewardship - where access rights and decisions belong to others

New ways needed to organise, analyse and generate knowledge

New partners and computational tools needed (as enablers)

AI requires a higher degree of care and new approaches to data

Follow up

Eun Seo Jo and Timnit Gebru. 2020. Lessons from archives: strategies for collecting sociocultural data in machine learning. In Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT* '20). Association for Computing Machinery, New York, NY, USA, 306–316. DOI: 10.1145/3351095.3372829 [\[link\]](#)

ALIA InfoOnline 2021. Artificial intelligence: challenging the nature of custodianship of information, Alexis Tindall, AI4LAM AU/NZ [\[link\]](#)

Indigenous frameworks for data-intensive humanities: recalibrating the past through knowledge engineering and generative modelling. Journal of Data Mining & Digital Humanities, 8 January 2021 [\[link\]](#)

AU & NZ AI4LAM chapter conversations/talks playlist [\[link\]](#)

Our motivation?



A love for digital cultural heritage and the humanities

A curiosity for knowledge and technology that now includes AI

A pleasure in working with others and learning from each other

A commitment to care ethics and advocacy for literacy

Our ethos

Community membership operates as a brains trust - cooperation and collective expertise and skill is needed

Community outreach and advocacy - community members, leaders, specialists and experts are sought out to advance collective knowledge and raise awareness

Take a turn and share the effort - facilitation, coordination, communication

The law of two feet (Open Space Technology) - constructive participation and expectation setting

We're all in this together - collective action, benefit and outcomes

Invite and put out the welcome mat - openness means interested parties are encouraged to join

Our approach -- is to walk and work together

We anticipate that bringing computer scientists, humanities researchers, data scientists, and GLAMR professionals together on equal footing -- and in many cases having communities lead us -- will lead to fantastic research collaboration, in artificial intelligence and machine learning, robotics, information systems, systems engineering, analytics and visualisation.

Who to contact?

Aotearoa New Zealand

Adam Moriarty - Auckland War Memorial Museum

Dr Sydney Shep - Victoria University of Wellington

Australia

Ingrid Mason - (soon) Australian National University - AU Data Archive

Alexis Tindall - University of Adelaide Library

Where to look?

Norway National Library - produced their own NLP model for Norwegian - built off their digital heritage collections.

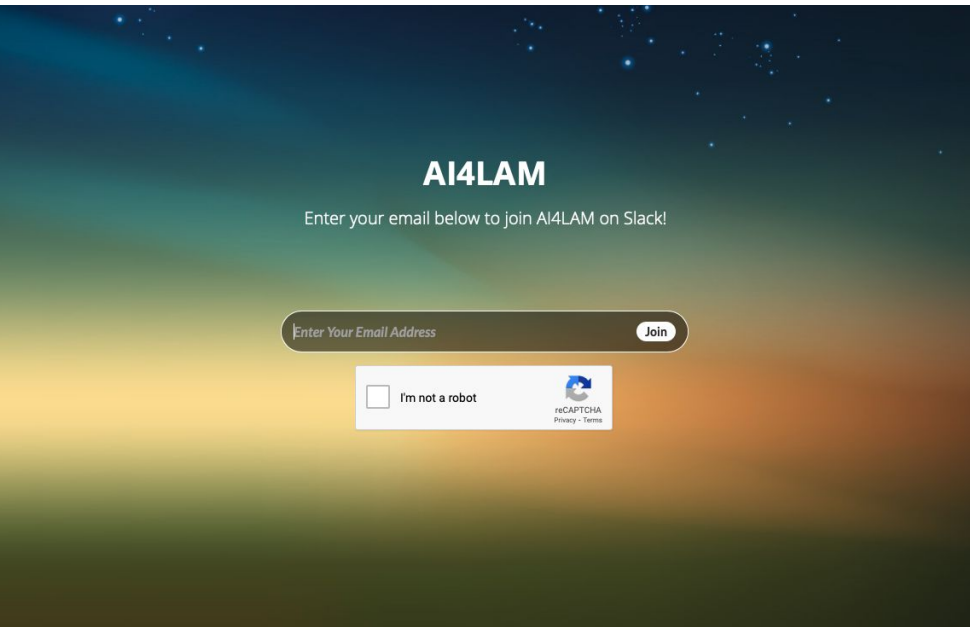
<https://github.com/NBAiLab>

French National Library (BNF) - partnerships with research for web log analysis and modelling of behaviour patterns.

<https://hal.archives-ouvertes.fr/hal-01968742v2/document>

Join us ... #aunz-chapter on Slack

<https://ai4lam-inviter.herokuapp.com>

A screenshot of a web form for joining the AI4LAM Slack channel. The background is a dark blue and green gradient with a starry pattern. The text 'AI4LAM' is prominently displayed in white. Below it, a message says 'Enter your email below to join AI4LAM on Slack!'. There is a text input field with the placeholder 'Enter Your Email Address' and a 'Join' button. Below the input field is a reCAPTCHA widget with the text 'I'm not a robot' and the reCAPTCHA logo.

2018: Norway NL/Stanford Library collaboration

2019: Secretariat set up incl BNF

2020: 90 registrations of interest, 67% AU 33% NZ

- 48% universities
- 25% libraries
- 11% archives
- 8% research
- 4% education
- 14% industry, government, gallery, records, museum

2021: 102 in AI4LAM Slack #aunz-chapter

Coverage

- Sectors and countries ✓ 😊
- Technologists, tech enthusiasts and curious 🔍 🤖

A photograph of the Uluru rock formation in Australia. The rock is a deep red-orange color and dominates the center of the image. It has a smooth, rounded shape with some vertical lines or cracks visible. The sky is a clear, vibrant blue. In the foreground, there is a field of dry, yellowish grass. Several green trees are scattered across the foreground, particularly on the right side. The text is overlaid on the lower left portion of the image.

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