

What Are The Long Term Implications Of AI For Humanity?

M2 AI Summit

Albert Bifet (@abifet) 7/09/2023



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WAIKATO
Te Whare Wānanga o Waikato

ChatGPT Sprints to One Million Users

Time it took for selected online services to reach one million users



* one million backers ** one million nights booked *** one million downloads
Source: Company announcements via Business Insider/LinkedIn





Give a talk on "What Are The Long Term Implications Of AI For Humanity?" in the voice of Albert Bifet



Certainly! Albert Bifet is a well-known figure in the world of data stream mining and machine learning. While I can't perfectly mimic his voice, I can certainly craft a talk in his style, focusing on the long-term implications of AI for humanity, based on his expertise and interests.



"What Are The Long Term Implications Of AI For Humanity?"

By Albert Bifet (as imagined by ChatGPT)

Ladies and gentlemen, esteemed colleagues, and curious minds,

Today, I wish to delve into a topic that is not just close to my heart but is also shaping the very fabric of our society: the long-term implications of Artificial Intelligence for humanity.

JUNE 12, 2023

TIME

THE END OF

HUMANITY

HOW REAL IS THE RISK?

A SPECIAL REPORT

A Warning About AI from 1863 (!)

The Inspiration for Dune's Butlerian Jihad

PESSIMISTS ARCHIVE
10 MAR 2023

11 2

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Although at so short a notice it is a crowded one.

Correspondence.

DARWIN AMONG THE MACHINES.

SIR,—There is simply a question of time, but that the time will come when the machines will hold the real supremacy over the world and its inhabitants, is what I think is matter of course. It is a question of time, but that the time will come when the machines will hold the real supremacy over the world and its inhabitants, is what I think is matter of course.

Day by day however the machines are gaining ground upon us; day by day we are becoming more subservient to them; more men are daily

structure of the intelligent play of the mind; yet this little creature the cumbrous clocks

A century and a half before Eliezer Yudkowsky would warn of an end times brought about by intelligence machines, Samuel Butler did the same in an 1863 letter (1,2) to the editor a New Zealand Newspaper.

The Press

Christchurch, Canterbury, New Zealand •

Sat, 13 Jun 1863

Page 1



The upshot is simply a question of time, but that the time will come when **the machines will hold the real supremacy over the world** and its inhabitants is what **no person of a truly philosophic mind can for a moment question.**

FEATURED STORY

Why AI Will Save the World

Marc Andreessen

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TABLE OF CONTENTS

[AI can make everything we care about better](#)

[Why the panic?](#)

[The Baptists and Bootleggers of AI](#)

Posted June 6, 2023

The era of Artificial Intelligence is here, and boy are people freaking out.

Fortunately, I am here to bring the good news: AI will not destroy the world, and in fact may save it.

Generative AI Jobs

International Labour Organization

français | español

▶ Advancing social justice, promoting decent work
ILO is a specialized agency of the United Nations

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Artificial intelligence

Generative AI likely to augment rather than destroy jobs

ILO report assesses the impact of generative artificial intelligence on job quantity and quality.

Press release | 21 August 2023



Tools

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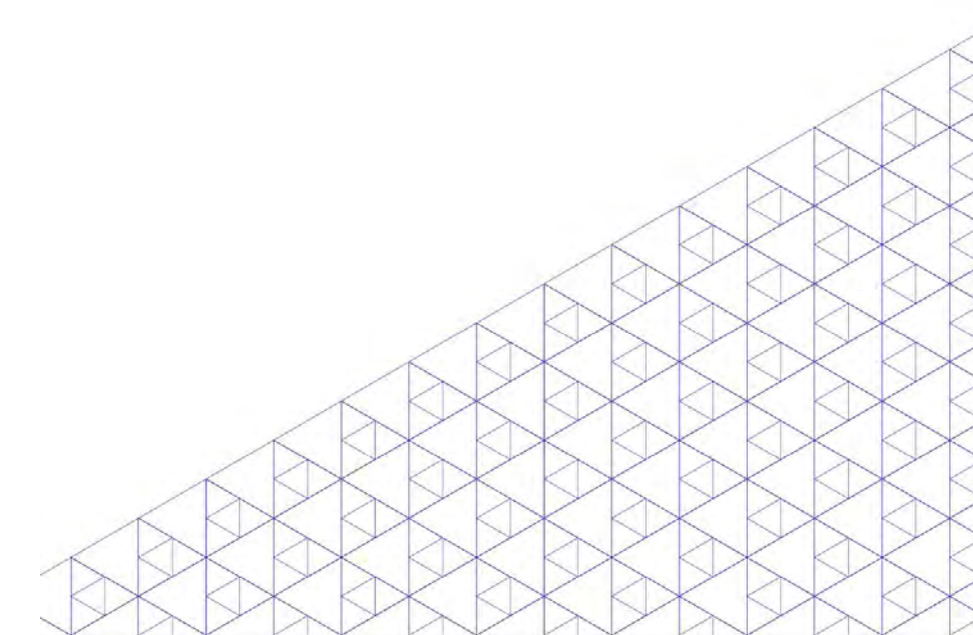
[f](#) [t](#) [in](#)

International Labour Organization

ILO Working Paper 96
August / 2023

▶ Generative AI and Jobs: A global analysis of potential effects on job quantity and quality

Authors / Paweł Gmyrek, Janine Berg, David Bescond



Augmented Intelligence

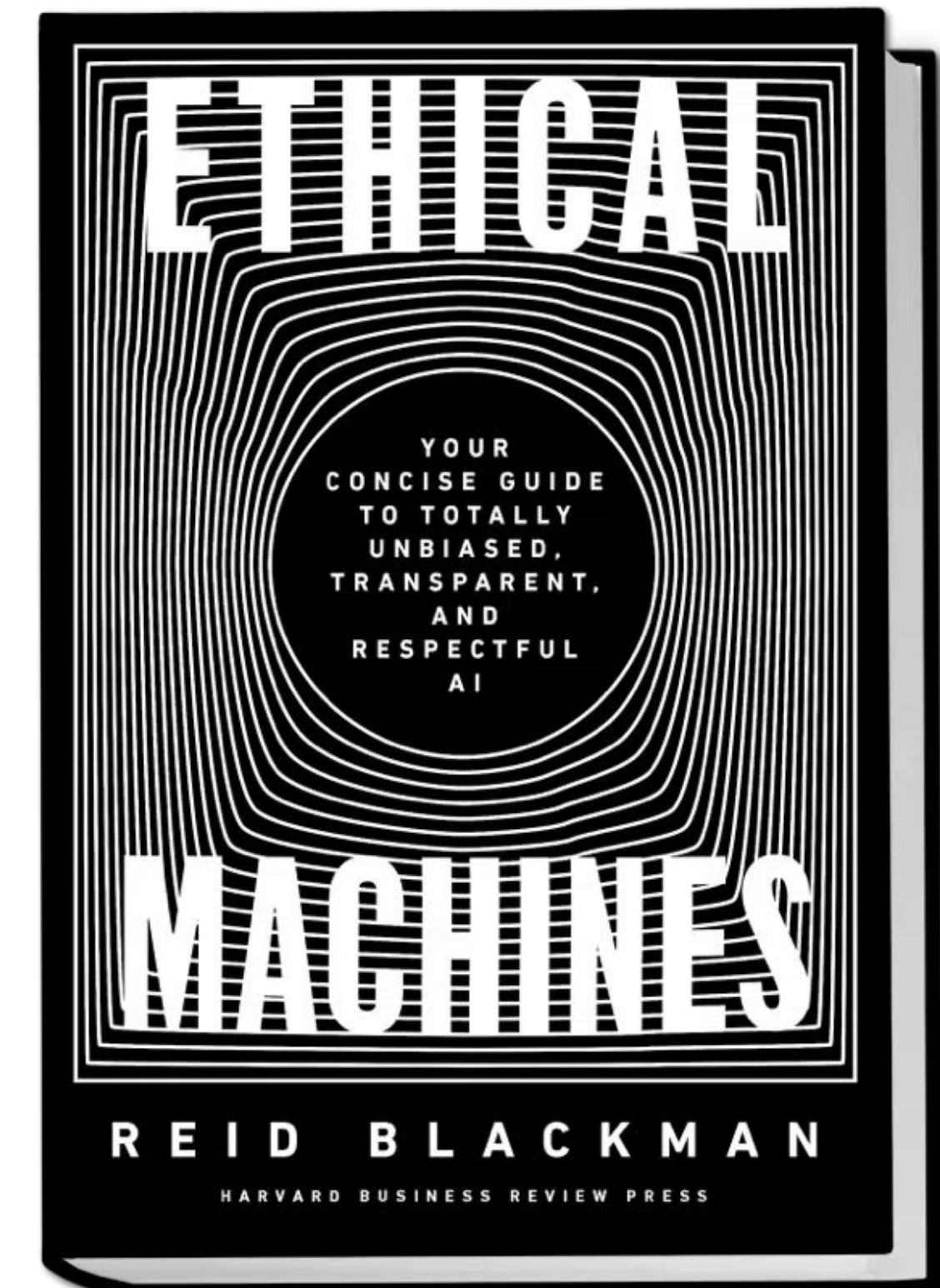
Digital Divide

Non-autonomous AI

AI Ethics

Responsible AI: responsible development and use of AI

- Data
 - Fairness - Unbiased
 - Privacy - Sovereignty
- Algorithms
 - Explainability



FAccT23

6th Annual ACM Conference on Fairness, Accountability, and Transparency

Chicago, USA

12-15 June 2023

Best Paper Award

Presented to

Zichong Wang, Nripsuta Saxena, Tongjia Yu, Sneha Karki, Tyler Zetty, Israat Haque, Shan Zhou, Dukka Kc, Ian Stockwell, Xuyu Wang, Albert Bifet and Wenbin Zhang

For

[Preventing Discriminatory Decision-Making in Evolving Data Streams](#)



Aziz Huq
General Co-chair FAccT23



INTERVIEWS

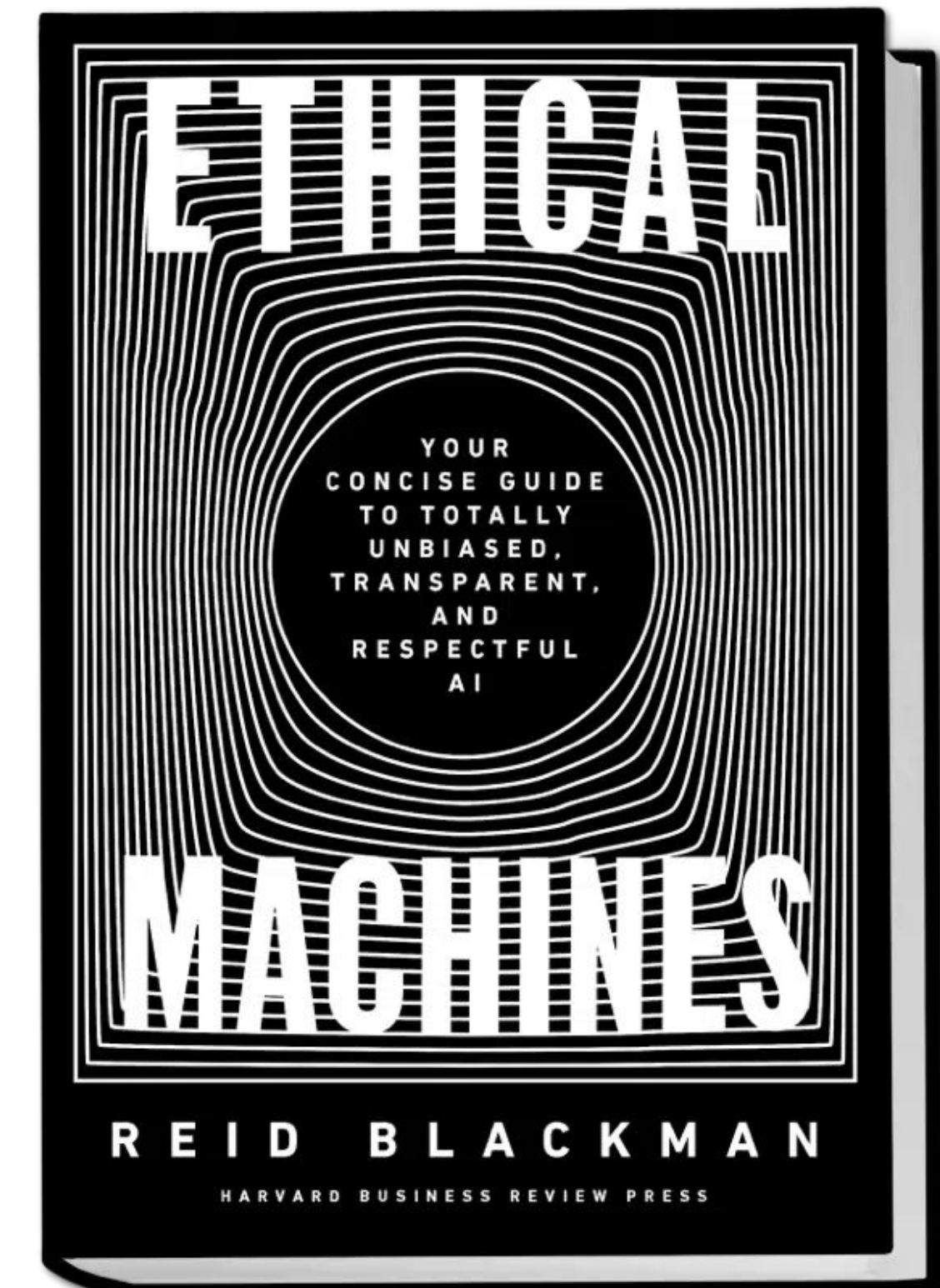
Harari: 'If you want to make a country a colony, don't send the tanks in. Just get the data out'



AI Ethics

Responsible AI: responsible development and use of AI

- Data
 - Fairness - Unbiased
 - Privacy - Sovereignty
- Algorithms
 - Explainability



WORLD

Robodebt: Illegal Australian welfare hunt drove people to despair

3:21 pm on 8 July 2023

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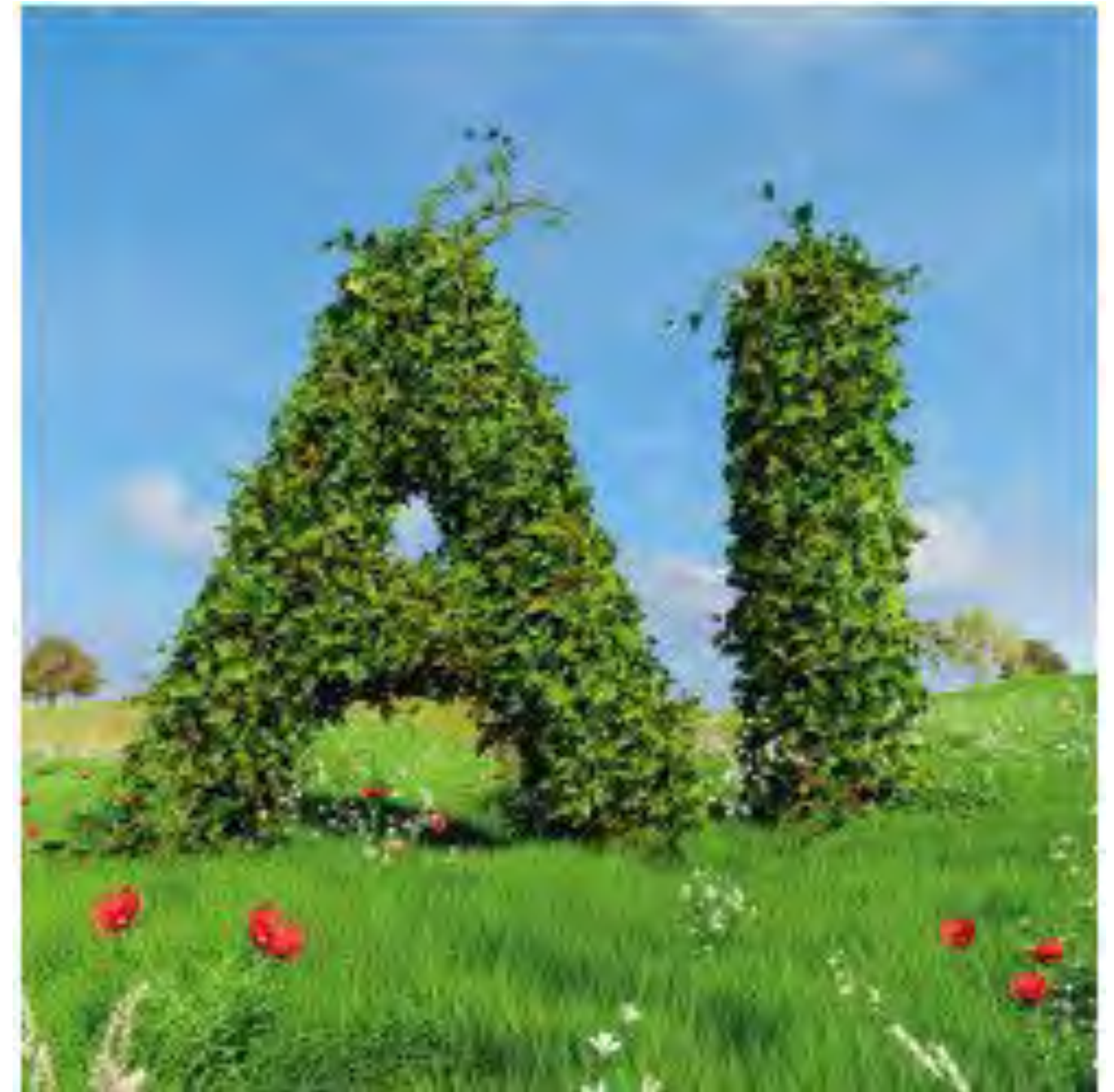
By Frances Mao for the BBC



The "Robodebt" policy vilified recipients of welfare, an inquiry has found (file photo). Photo: AFP

What's next for AI?

- Open Source
 - ChatGPT/Llama
- Centralized/Distributed Architecture
 - Data Lake/Data Mesh
- Energy Efficiency
 - Cloud/Local



Credit: Lisa Sheehan



TAIAO

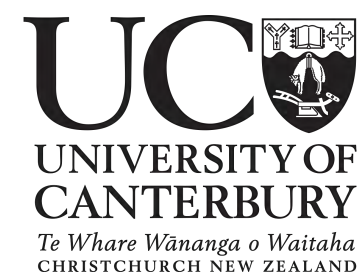
Time-Evolving Data Science
and Artificial Intelligence for
Advanced Open Environmental Science



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AUCKLAND
Waipapa Taumata Rau
NEW ZEALAND



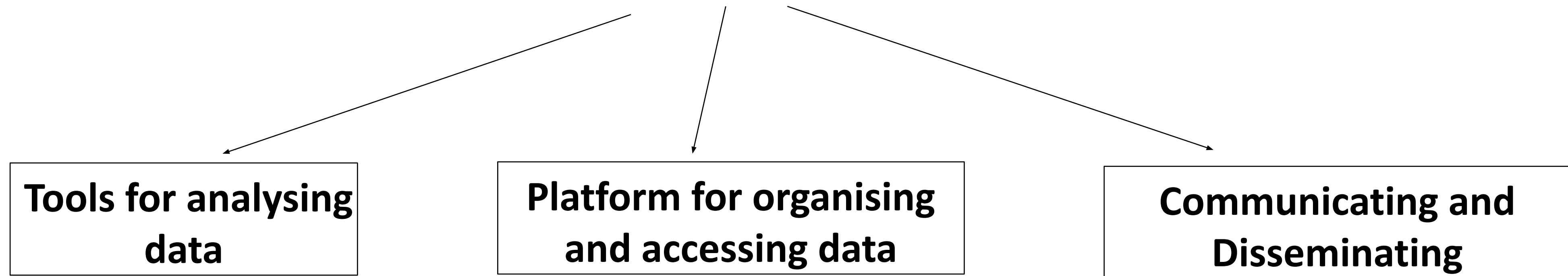
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CHRISTCHURCH NEW ZEALAND



1897
VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA



MetService
TE RATONGA TIHORANGI

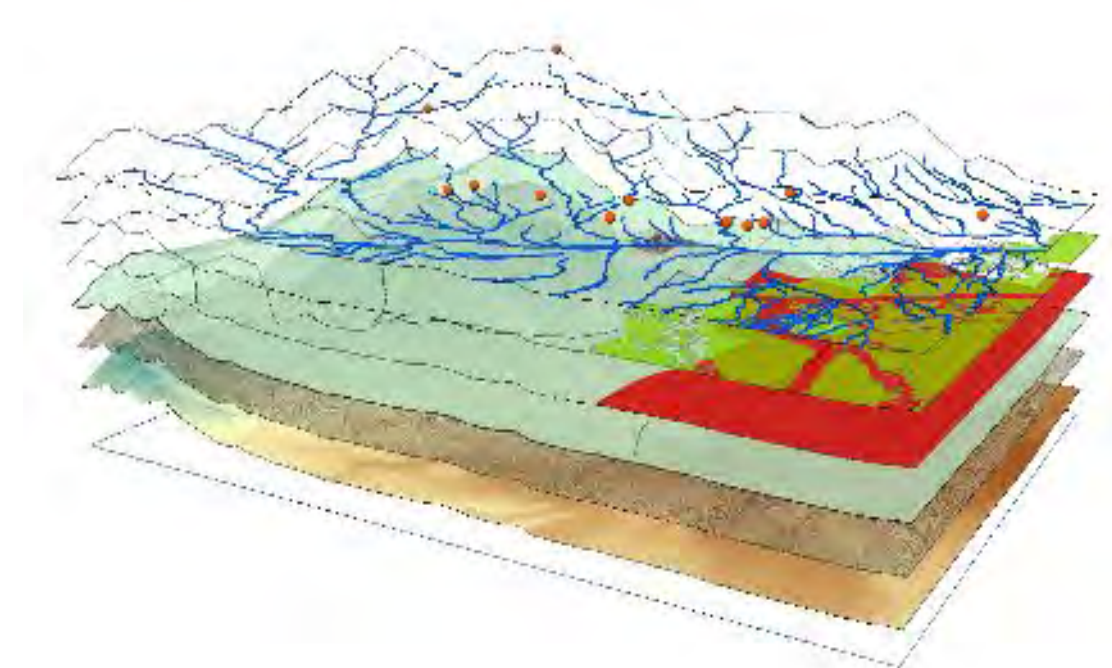
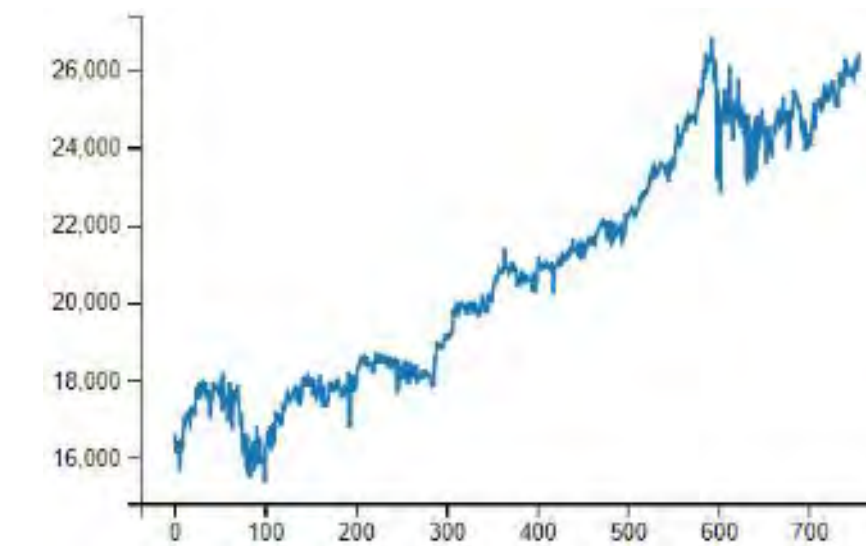


Team:

PhDs and Postdocs	Data scientist(s)	Environmental Scientist(s)	Software Engineer(s)
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Datasets:

- Large spatial and/or temporal resolution and coverage
- Ideally, ongoing collection
- Mix of currently accessible and to become accessible
- Something that people care about
- Suitable for data science challenges



MENU



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We are New Zealand data and environmental scientists using artificial intelligence to solve some of the biggest environmental issues facing New Zealand

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River

0.11.1

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Introduction

Recipes

Examples

API reference

FAQ

Releases

Benchmarks

River

A Python package for online/streaming machine learning.

Get started

GitHub



HE AHA TE MOMO? WHAT IS THIS?

He kōmaka momo mō Aotearoa
A species classifier for Aotearoa



SCHOOL OF COMPUTING &
MATHEMATICAL SCIENCES
TE KURA ROROHIKO ME NGĀ PŪTAIAO PĀNGARAU



Advanced Options +

Classify

Egretta novaehollandiae | White-Faced Heron | Matuku Moana

I am 99.9% certain this is a [Egretta novaehollandiae](#)!
It is colloquially known as a White-Faced Heron, or

View Top 5 -

1: 99.9% [Egretta novaehollandiae](#), White-Faced Heron, Matuku Moana

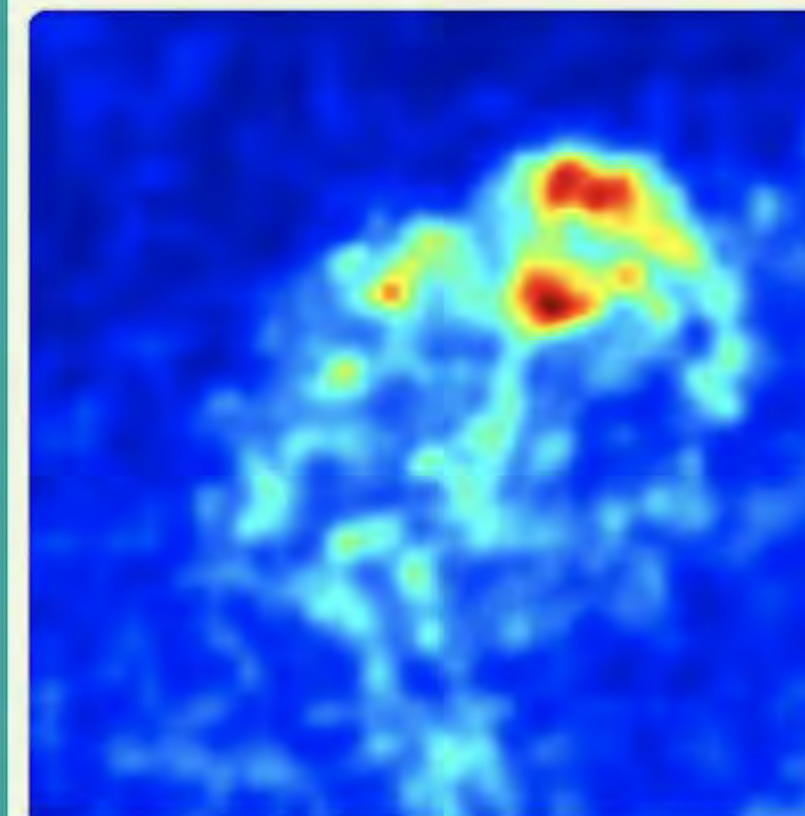
2: 0.00% [Podocarpus totara](#), Mahogany Pine, Amoka, Taitea, Totara

3: 0.00% [Griselinia littoralis](#), Broadleaf, Paraparauma, Kapuka, Tapatapauma, Papauma, Huaniki (Fruit), Maihihi

4: 0.00% [Vespula germanica](#), German Wasp

5: 0.00% [Microcarbo melanoleucos](#), Little Pied Cormorant

View Interpretation Methods -



Saliency Map

Saliency Maps compute the gradient of the output with respect to the input pixels, giving an indication of how much each pixel contributed to the final prediction.

Deconvolution

Deconvolution reverses the network's convolution operations, generating images most likely to cause the feature activation maps observed at inference.

Compute

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Technical Walkthrough

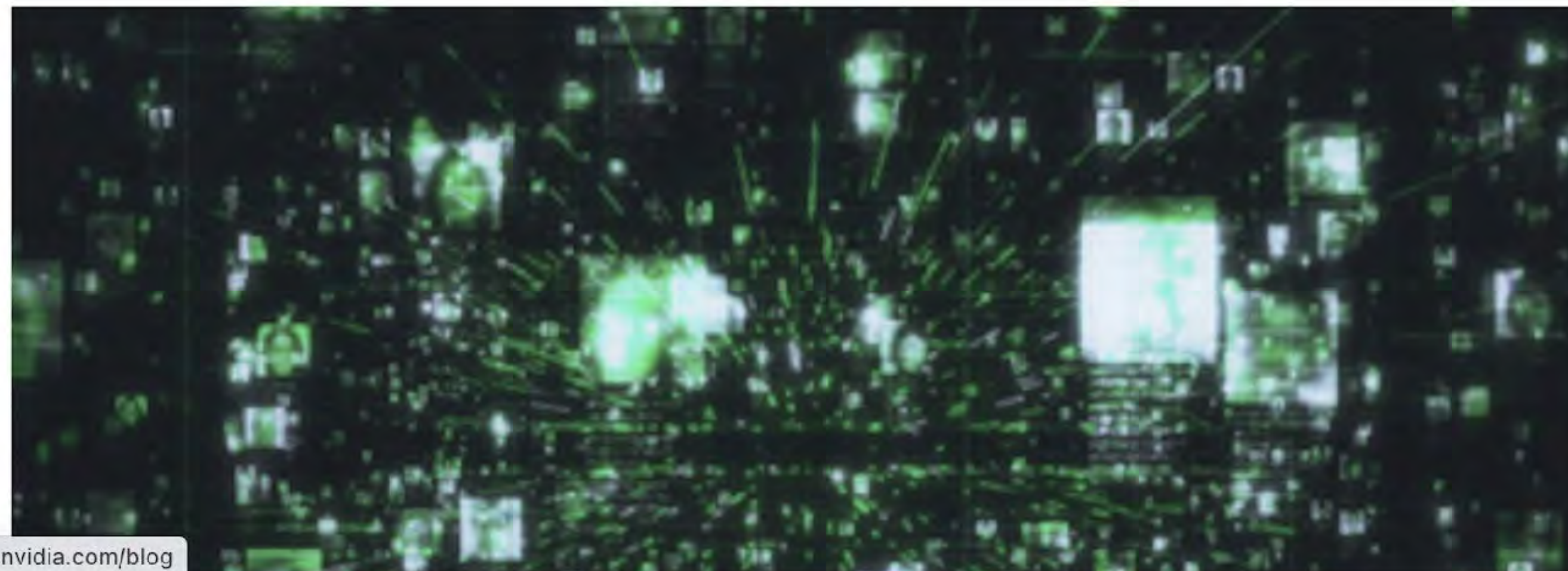
Jul 01, 2022 English

Speed Up Machine Learning Models with Accelerated WEKA

By [Albert Bifet](#), [Guilherme Weigert Cassales](#) and [Justin Liu](#)

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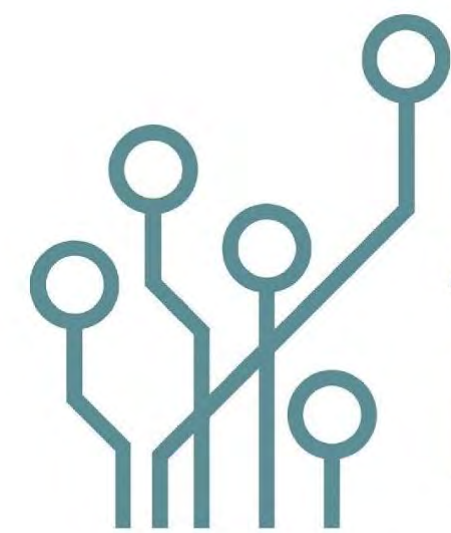


September 19-22
Get Hands-On Training



14 & 15 December, 2023
Tāmaki Makaurau Auckland

A meeting point for Aotearoa New Zealand's thriving artificial intelligence research community, innovating across many domains.



**Artificial Intelligence
Researchers Association**

400 members!

New Zealand AI

- R started at University of Auckland
- Weka started at University of Waikato



Discussion and White Papers



DISCUSSION PAPER:

ChatGPT & Large Language Models

What are the implications for policy makers?

MARCH 2023

 Artificial Intelligence
Researchers Association

Dr Paul Geertsema (Waipapa Taumata Rau / University of Auckland)
Prof Albert Bifet (Te Whare Wānanga o Waikato / University of Waikato)
Prof Richard Green (Te Whare Wānanga o Waitaha / University of Canterbury)

WHITE PAPER:

Aotearoa New Zealand Artificial Intelligence A Strategic Approach

NOVEMBER 2021

 Artificial Intelligence
Researchers Association

Prof Albert Bifet (Te Whare Wānanga o Waikato / University of Waikato) | Prof Richard Green (Te Whare Wānanga o Waitaha / University of Canterbury) | Dr Daniel Wilson (Waipapa Taumata Rau / University of Auckland) | Prof Mengjie Zhang (Te Herenga Waka / Victoria University of Wellington)

Our vision is that by 2030, Aotearoa New Zealand will have a community of cutting-edge companies producing and exporting AI technologies, supported by a strong network of researchers involved in high-level fundamental and applied research. Our main recommendations are:

 **Artificial Intelligence
Researchers Association**

White Paper



NOVEMBER 2021

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White Paper



Scientific Research: Increase funding for public AI research by developing a network of new research centres, hubs, and programmes in basic and applied AI research.



AI Talent Development: Augment capacity to attract, retain, and train domestic and international AI talent.



Industrialisation of AI Technologies: Create programmes to encourage private sector adoption of AI technologies, including investments in strategic sectors.



Ethical AI Standards: Create a task force to establish standards and regulations for the ethical use of AI, including culturally appropriate AI.



Data and Digital Infrastructure: Create an effective national data infrastructure with open data partnerships and datasets, while enabling and supporting Māori data sovereignty obligations, as well as commitments to create test environments and regulatory sandboxes. AI needs a good data infrastructure to be successful.



AI in the Government: Government leading the adoption of AI in administration, healthcare, infrastructure and regulation in ways that give effect to Te Tiriti o Waitangi.



Inclusion and Social Wellbeing: Use AI to promote socially inclusive growth and encourage an AI community that is inclusive of diverse backgrounds and perspectives.



White Paper



Executive Summary

EXECUTIVE SUMMARY

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Albert Bifet (@abifet) 7/09/2022



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