

Coding & STEM 4 Schools

Introductions and Workshop Aims

2019 AI Workshop

Presented by Mr Daniel Hickmott

12th November 2019

This Land

We acknowledge and respect the Pambalong clan of the Awabakal people, traditional custodians of this land.



Partners

Developed with support through:



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Supported by staff from the School of Education here at UoN

Introductions

I'm Elena

- I studied a Bachelor of Mathematics
- I studied a PhD in computer science at UoN
- I subsequently worked in Bioinformatics for a number of years
- Since 2012 I have worked in the School of Education

Introductions

I'm Daniel

- PhD Candidate in School of Education
- Studying Teacher Professional Development for the Digital Technologies curriculum
- Completed my Software Engineering degree in 2014
- Facilitating workshops in this area since 2013

Introductions

I'm Ben

- Final year of my Bachelor of IT at the University of Newcastle
- Majoring in Interactive Media
- Focussing on Media Production, Web Design and Development
- Interested in applying digital technologies in creative design, visual storytelling and virtual reality

Introductions

— And you?

Logistics

- Toilets
- Fire alarm
- Login

Workshop Aims

- To be a practical and accessible introduction to [Machine Learning](#)
- Introduce some essential steps commonly used when creating [Machine Learning](#) solutions
- Explain different types of [Machine Learning](#) and things to consider when using [Machine Learning](#)
- Give you ideas and resources to explore these topics further

Sessions (Morning)

- **Artificial Intelligence and Machine Learning**
 - Types of Machine Learning algorithms
 - Solving problems with Machine Learning
- **Training an Assistant**
 - Machine Learning for Kids
 - Training a computer with examples

Sessions (Before Lunch)

- **Representing and Collecting Data**

- The importance of data

- Identifying attributes when creating solutions

- **Journey to School**

- Crowdsourcing data

- Evaluating a model

Sessions (Afternoon)

— Computer Vision

- Exploring how computers 'see'
- Recognising features and faces

— Snap!

- Taking pictures of examples
- Creating a game