Royal Society Machine Learning Project

Science for Policy

Aleks Berditchevskaia

THE ROYAL SOCIETY

Why Machine Learning?

Horizon scanning by Policy staff in 2014 led to the formation of a Core Group of experts.

<u>Areas for consideration</u>

1. What are the key questions relevant to society?
2. Is it important to do this work now?
3. Is anyone else doing it?

Core Group helped to identify the key focus proposed to the Council of the Royal Society.

Royal Society to investigate the potential economic and societal impacts of Machine Learning and its applications in the UK

The project **aims** are:

1. To **increase awareness** of machine learning among UK and EU policymakers, the UK public and industry.
2. To raise the level of **public debate**.
3. To identify the **key scientific and technical challenges**, and the core **social, ethical and legal issues** raised by machine learning and suggest how they can be addressed.
4. To maintain a **UK and near-term** (5-10 years) focus.

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Royal Society to investigate the potential economic and societal impacts of ML and its applications in the UK

The project is being led by a **Working Group** involving a range of expertise:

Professor Peter Donnelly FMedSci FRS

Chair

Professor Margaret Boden OBE FBA

Member

Professor Roger Brownsword

Member

Professor Marcus du Sautoy OBE

Member

Dr Nathan Griffiths

Member

Professor Nick Jennings

Member

Professor Mirella Lapata

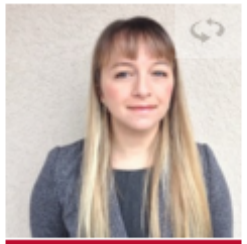
Member

Professor Neil Lawrence

Member

Dr Demis Hassabis

Member



Dr Sabine Hauert

Member

Dr Hermann Hauser KBE FREng FRS

Member

Professor Zoubin Ghahramani FRS

Member

Professor Sophia Olhede

Member

Dame Janet Thornton DBE FMedSci FRS

Member

Professor Yee Whye Teh

Member

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Working Group led policy projects Overview

Project development

Proposal developed based on review of policy context and potential impact.

Project approval by the Council

Report development

Gathering and analysing evidence; stakeholder engagement; agreeing narrative and conclusions; drafting; review and sign-off.

Council approval

Prepare for launch

Final edits and sign-off; design and production; finalising launch, **communication and engagement.**

Launch

Engagement and influencing

Engaging, informing and influencing stakeholders; follow-up and evaluation.

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What will come out of the project?

- **Online material** to explain machine learning and its applications from Spring 2016 onwards.

- Public **events** to engage our key audiences, including **the UK public, industry, policymakers** and the **ML community.**

- Evidence-based recommendations in a **policy report** for UK and EU policy makers, to be published late 2016 or early 2017.

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Project Milestones

10 November 2015	1st Working Group meeting
19 November 2015	Public announcement (press release; webpage; call for evidence)
December – July 2016	Evidence gathering activities (market research; workshops)
April 2016	First public event(s), kick-off of public engagement campaign (inc. online)
Summer 2016	Testing out project recommendations on our audiences
Late 2016 / Early 2017	Report Launch
2017	Ongoing dissemination (Hay festival etc)

We want to know what you think

- The project will identify and analyse issues that need to be addressed to ensure the **societal benefits of the technology are maximised and risks minimised.**

- We are gathering views. Respond to our Call for Evidence (closing date **3 January 2016**), accessible from Machine Learning webpage or contact the team at machinelearning@royalsociety.org

Any questions?

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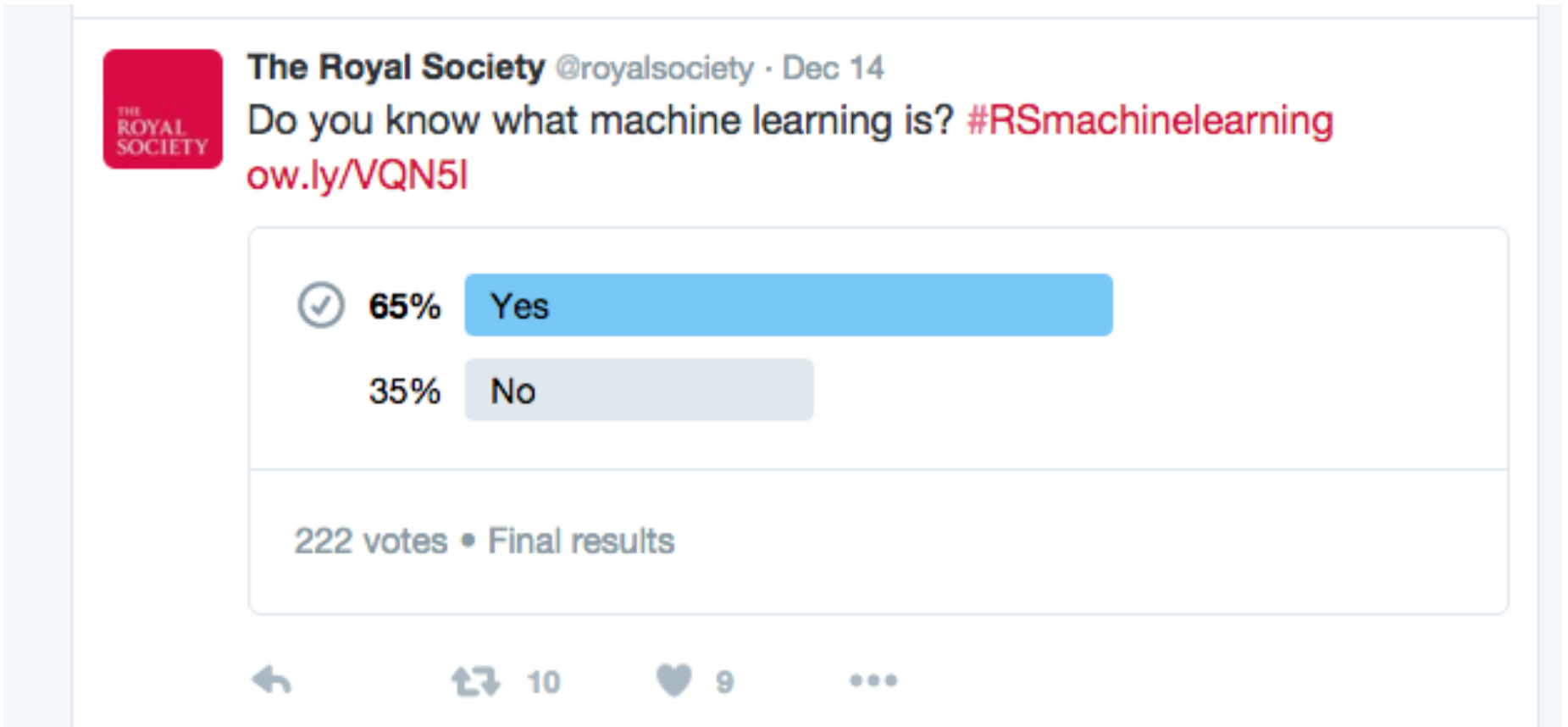

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