

Accessible training for diverse data users

What happened?

Training designed by [ASG-funded](#) data scientists and ethics researchers at [The Alan Turing Institute](#) is helping people from diverse organisations and backgrounds to develop their data science skills. Courses cover technical aspects of software engineering, but also, crucially, how to deliver ethically sound AI and data projects that can be reproduced for wider benefit. They are delivered online and free-to-access, thus reducing barriers to participation.

What are the real-world impacts?

- Openly available guides to '[Responsible research and innovation \(RRI\)](#)' and '[Public engagement](#)', as well as a '[Citizen's guide to data](#)', can be accessed via the [Turing Commons](#) platform.
- 75 people worldwide attended three live, online Turing Commons training courses on [RRI](#) (2021), [public engagement](#) (2022) and [AI ethics and governance](#) (2022), informing their work with data across multiple sectors including law, academia and the tech industry.
- 40 students and researchers developed practical data science skills in the first [Research data science](#) course, delivered by the Turing's [Research Engineering Group](#) (REG), in November 2021. The course will be given again in February 2023.
- Via a partnership with the [Francis Crick Institute](#), REG data scientists also recognised the need for specific data science training for senior biomedical researchers and developed two self-paced masterclasses, including training on [supervising open and reproducible computational projects](#).

Why was the Turing's ASG programme uniquely placed to do this?

- The Turing is home to world-leading expertise in RRI and as the national institute for AI and data science has a responsibility to ensure high-quality RRI training is available to data scientists and those developing data-driven technologies, as well as others working across a wide range of disciplines where data is used.
- ASG-funded work on AI ethics, including the public sector guidance '[Understanding AI ethics and Safety](#)', provided foundations and inspiration for the Turing Commons.
- Expertise within the REG spans the entire academic spectrum, providing students attending REG training courses with broad perspectives on software engineering.
- The ASG-funded Turing-Crick work was built on an [existing partnership](#) with the Crick and previous collaborations including a biomedical summer school project.

What's next?

- Refining and expanding Turing Commons resources in collaboration with UK Centres for Doctoral Training, helping universities to tailor training to different disciplines.
- Stakeholder engagement to understand how future REG training opportunities could be developed to benefit a wider range of disciplines, particularly in the transition from academic researcher to industry practitioner.

“I wanted clarity on where to draw the line in feeding personalised data to a machine and in letting the machine make decisions. The [Turing Commons RRI] course provided me with frameworks that I can rely on to ensure that I do not cross that line.”

Anand Kumaresk K, Data Scientist, Hewlett Packard Enterprise, India

