Google Season of Docs 2020 Application

Title: The Turing Way: A how to guide to data science

Applicants: Malvika Sharan & Kirstie Whitaker

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The Turing Way is an open-source, community-led and collaboratively developed book project on making data research accessible for a wider research community (<a href="https://the-turing-way.netlify.com">https://the-turing-way.netlify.com</a>). We bring together individuals from diverse fields and expertise to develop practices and learning resources that can make data research comprehensible and useful for everyone. The project is openly developed and all questions, comments, recommendations and discussion are facilitated through an <a href="https://en.project.org/niho/">online GitHub repository</a>.

Our community members are researchers, engineers, data librarians, industry professionals, and experts in various domains, at all levels of seniority, from all around the world. Since the project's launch in April 2019, they have co-authored chapters on <u>research reproducibility</u> by compiling best practices, tools and recommendations used by the scientific communities worldwide.

Since the project has grown from a small team of 10 researchers to a community of 125 contributors, the scope of *The Turing Way* book has also expanded to include different aspects such as project design, collaboration, communication, and ethics in data research (<u>preview</u>, pull request #977). The project aims to provide learning and training resources on a wide array of topics and builds on case studies provided by Turing researchers, impact stories contributed by individuals, and workshops delivered by the team members.

For this project, the Google Season of Docs technical writer will review the existing chapters and provide editorial support on incorporating new content, such as the chapters on distributed collaboration, which are currently under development. Based on their personal preference, they will have the possibility to contribute to one or more newly proposed sections of the book by developing resources (in English) such as new chapters, interactive tutorials, impact stories, and case studies with the help of our community members. If they have a good understanding of Chinese, Hindi or Spanish, they can also choose to translate the existing materials in one of these languages. They will be provided with appropriate guidance and opportunity to work in a positive working environment. They will be fairly acknowledged for their contributions to the project. The final goal will be to identify opportunities to enhance the quality of the book by improving its language and structure that can make *The Turing Way* accessible for graduate students, research software engineers, senior investigators and administrative teams.

Optional technical reading: The Turing Way is hosted as a Jupyter Book at <a href="https://the-turing-way.netlify.com">https://the-turing-way.netlify.com</a>. Jupyter Books can format markdown files and Jupyter notebooks as static HTML making them easy to read. When a notebook is included in the book, the static page includes a link to an interactive version of the notebook via <a href="Binder">Binder</a>. We are upgrading to the latest version of Jupyter book and intend to integrate more interactive features, which are currently underutilised. The translation efforts are supported through <a href="Transifex">Transifex</a>.

## **Proposed mentors:**

- Kirstie Whitaker (kwhitaker@turing.ac.uk)
- Malvika Sharan (<u>msharan@turing.ac.uk</u>)

## Recommended skills:

- Writing and editing skills in the English language
- Experience working in distributed communities, ideally using git and GitHub

• Experience collaborating on data science or quantitative research projects at any level

Optional skills (we understand that technical writers may not have all these skills):

- Interactive visualisation
- Data science ethics
- Community building
- Translating English content into Chinese, Hindi or Spanish

## **Expected outcome:**

An enhanced version of *The Turing Way*'s existing chapters, editorial support for new contributions by the community members and resource development for one of the newly proposed sections of the book.

**Difficulty level:** Medium if the candidate has prior experience of working with git and GitHub. However, resources and guidance will be provided by the mentors.