Title

Workshop: Physicalising Workshop for Efficient Algorithm and Big Data Understanding to Foster Knowledge exchange and Inclusive AI Application in Companies

Introduction

Addressing the Regulatory Gap and Embracing AI in the United Kingdom

The United Kingdom currently lacks comprehensive rules and regulations concerning AI, further highlighting the necessity for guidance in decision-making. Simultaneously, the country aims to embrace AI as part of the fourth industrial revolution, recognizing its potential to significantly enhance GDP.

The Importance of Responsible and Mindful AI Applications for Companies

The responsible and mindful application of AI technology is of critical importance for companies, as non-compliance with AI policies can lead to severe consequences such as taxes or even business discontinuation. However, many individuals outside the field lack an understanding of AI and its inner workings, leaving them unable to actively engage in discussions with stakeholders. Therefore, there is a clear need for assistance and support in decision-making processes related to AI.

Bridging the Gap: Fostering a Holistic Understanding of AI Among Stakeholders

Moreover, engineers and developers involved in AI implementation often operate in isolation, predominantly focusing on technical aspects. This limited perspective hampers their ability to consider broader factors such as algorithmic and data ethics. Therefore, there is a need to bridge this gap and foster a more holistic understanding of AI among various involved stakeholders.

Workshop-Based Approach for Responsible AI Application and Decision-Making

Considering these challenges, this project proposal seeks to address the importance of responsible AI application and decision-making. It aims to provide support to companies, promote the adoption of AI in the UK, and bridge the gap in knowledge and understanding among diverse stakeholders, including non-technical personnel. The proposed approach centres around a workshop-based approach using physicalising and inclusive methodologies to facilitate knowledge transfer, remove hierarchical barriers, and incorporate data ethics, social considerations, and environmental aspects into the conversation surrounding AI applications within companies. By implementing this comprehensive workshop-based

strategy, I aspire to foster a more informed and responsible approach to AI implementation and decision-making processes.

Objectives

- Create a workshop framework that removes hierarchical barriers and fosters knowledge transfer among diverse stakeholders.
- Incorporate data ethics, social considerations, and environmental aspects into the AI application conversation within companies.
- Promote diversity of voices and perspectives within the workshop setting.

Methodology

The proposed methodology consists of the following steps:

- Step 1: Literature Review
  Conduct an extensive review of existing literature on algorithm explanation techniques, physicalisation methods, knowledge exchange approaches, data ethics, social considerations, and environmental aspects in AI applications. This review will inform the development of the workshop framework.

- Step 2: Physicalisation Techniques
  Explore various physicalisation techniques that can be employed to represent algorithms and big data in a tangible and understandable manner. This may include using physical objects or interactive displays.

- Step 3: Workshop Design
  Design a workshop framework that integrates the identified physicalisation techniques to effectively convey algorithmic concepts and big data understanding. The workshop will be structured to ensure active participation and engagement from all stakeholders, encouraging open discussions and knowledge sharing.

- Step 4: Inclusive Approach
  Develop strategies to remove hierarchical barriers within the workshop setting. Foster an inclusive environment where all participants, regardless of their technical expertise or organisational role, feel empowered to contribute to the conversation. Incorporate techniques such as pair programming, group activities, and feedback sessions to facilitate knowledge transfer and diversity of voices.

- Step 5: Data Ethics and Social/ Environmental Considerations
  Integrate discussions on data ethics, social impact, and environmental considerations into the workshop sessions. Encourage participants to critically analyse the implications of AI applications and explore ways to mitigate potential risks and

biases. Provide guidance on incorporating responsible AI practices throughout the development and implementation process.

- Step 6: Evaluation
  Assess the effectiveness of the workshop methodology through participant feedback, post-workshop assessments, and qualitative analysis of workshop outputs. Evaluate the impact of the physicalisation techniques, knowledge exchange, and inclusivity aspects on participants' understanding of algorithms, big data, and ethical considerations.

Expected Outcomes

The proposed research aims to achieve the following outcomes:

- A workshop framework utilising physicalisation techniques to enhance algorithm and big data understanding.
- Increased knowledge exchange and collaborative learning among diverse stakeholders within the company.
- Heightened awareness and consideration of data ethics, social impact, and environmental aspects in AI application discussions.
- A more inclusive environment that encourages participation and diverse perspectives.

Empowered stakeholders capable of applying algorithms and big data ethically, socially responsible, and environmentally conscious.

Conclusion

This research proposal presents an approach to address the challenges of explaining algorithms and big data in an inclusive and ethical manner within the context of AI applications in companies. By leveraging physicalisation techniques and designing workshops that foster knowledge exchange and diverse perspectives, I aim to empower stakeholders with the necessary understanding to make informed decisions regarding AI implementation.

Furthermore, incorporating data ethics, social considerations, and environmental aspects will ensure responsible and sustainable AI practices.

NOTE: Generated by ChatGPT with my direction in mind. Subsequently modified by me to align to my vision.