TechSheCan: Empowering Women in Technology

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Table of Contents

Summary

The TechSheCan project aimed to bridge the gap between female non-cognate students and computer science students by promoting awareness, interest, and engagement in Data Science and Artificial Intelligence (AI) fields. Three events were organized, particularly focused on encouraging women to explore and consider careers in technology.

Event Details

Event Name	Event Date	Number of Registrations
Green Datathon 1: Mapping Forest Futures	3rd July 2024	38
Green Datathon 2: Mapping Forest Futures	17th July 2024	42
UX/UI Design Hackathon: Crafting a Greener Future	23rd August	46

Event Description

The TechSheCan event series comprised three sustainability-themed sessions designed to inspire and equip women with skills in Data Science and AI. We hosted two Green Datathons focused on analyzing global forest trends using the FAO's dataset (1990-2020). These events featured

Kehinde Makinde, a Data Analyst who transitioned from Information Security, and Souvenir Okey, a Business Analyst with expertise in both Machine Learning and business. During these datathons, I conducted beginner-friendly, code-along workshops using Google Colab, guiding participants through Python libraries for data analysis, cleaning, manipulation, and basic prediction tools.

Our final event was a UX/UI Design Hackathon centered on crafting a greener future. Sarah Longbottom, who transitioned from a non-computing background shared her journey. The session included an overview of UI/UX concepts, Figma demonstration, and discussions on enhancing the design process. Participants worked in teams to design Personal Carbon Footprint Dashboards, which they presented at the end of the session.

Event Outcome

Undergraduate and postgraduate students from various disciplines had substantial improvements in their knowledge across various technical areas, including data science skills (such as data cleaning, analysis, and visualization) and design competencies (like UI/UX design and prototyping with Figma) was observed through the survey. Notably, there was a marked increase in interest in pursuing technology-related careers, with many participants expressing a higher likelihood of entering fields such as AI, Data Science, and Design/Generative AI after attending the events.

The quality of challenges provided across all events was consistently rated as good to excellent, contributing to the overall positive experience. Participants particularly valued the opportunities for learning new skills, collaborating with peers, and networking. These results underscore the success of the events in both enhancing technical knowledge and inspiring career interest in technology fields among the diverse group of attendees.

Conclusion

The TechSheCan project promoted female role models in technology, increased AI/Data Science interest among non-cognate students, and built a supportive community for those exploring computer science. It encouraged interdisciplinary collaboration, providing learning and networking opportunities, successfully empowering women and bridging the gap between non-cognate students and tech careers.

Future Recommendations

To sustain momentum and interest, it is essential to continue organizing similar events while expanding the range of topics to include emerging technologies. Increasing collaboration with industry partners will provide participants with real-world insights and developing a mentorship program can offer ongoing support to those interested.

Appendices

Fig 1 & Fig 2: Marketing Materials for Hackathon and Datathon respectively.

Fig 3: Green Datathon, dated 3rd July 2023, teams kickoff!

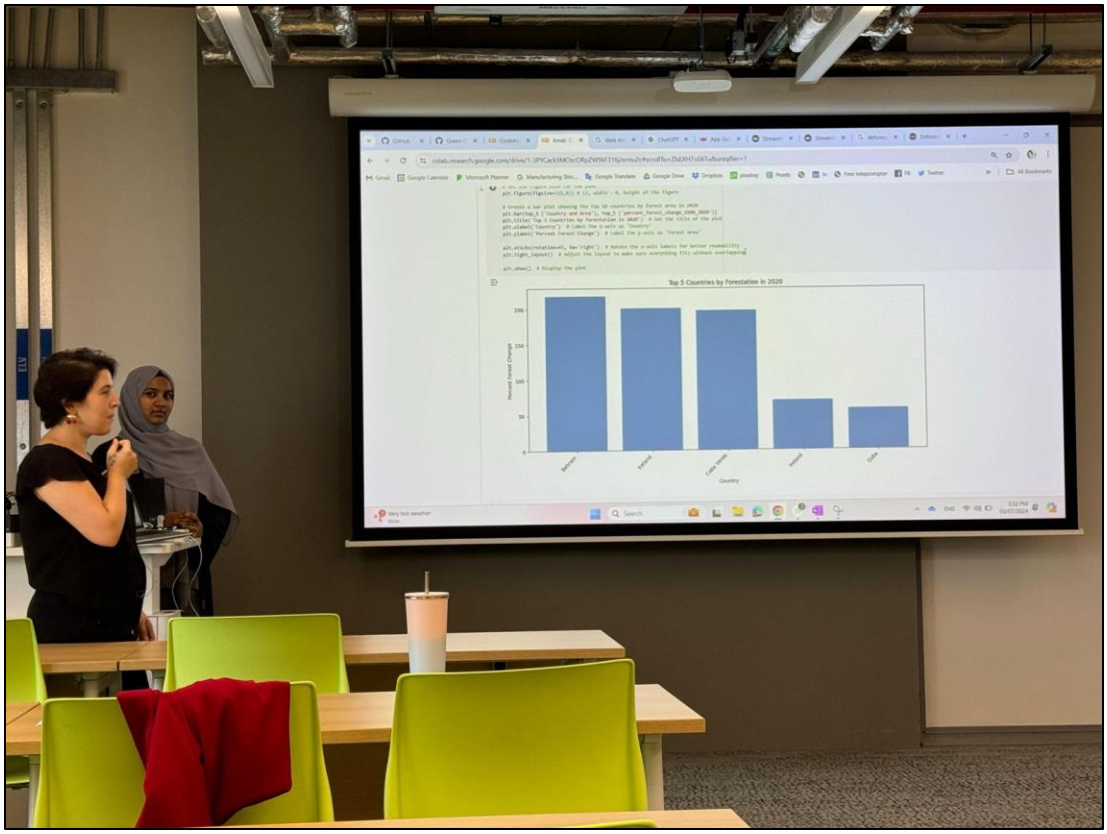

Fig 4: Participant talking about their findings in the datathon

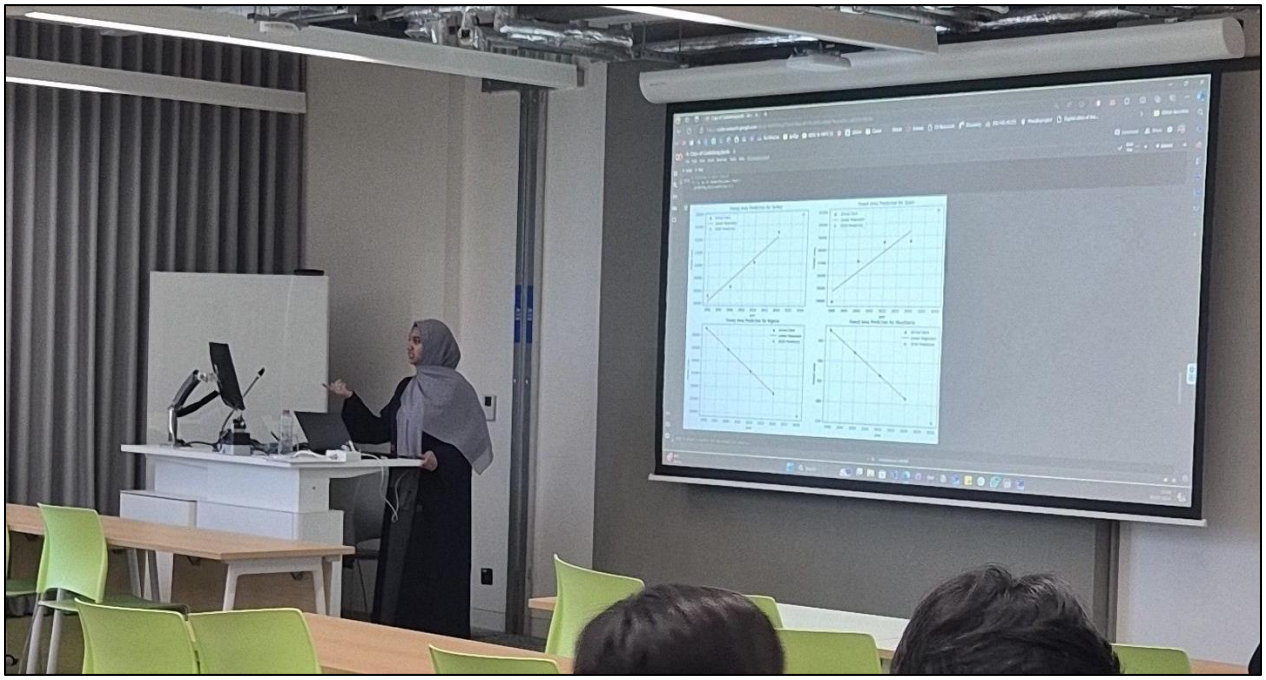

Fig 5: Speaker (Mufliha) taking participants through the code along

Fig 6 (Left) & Fig 7 (Right): Teams working on their dashboards in the hackathon on the left, and Dr. Drishty Sobnath (Project Supervisor) addressing the participants at the beginning of the datathon

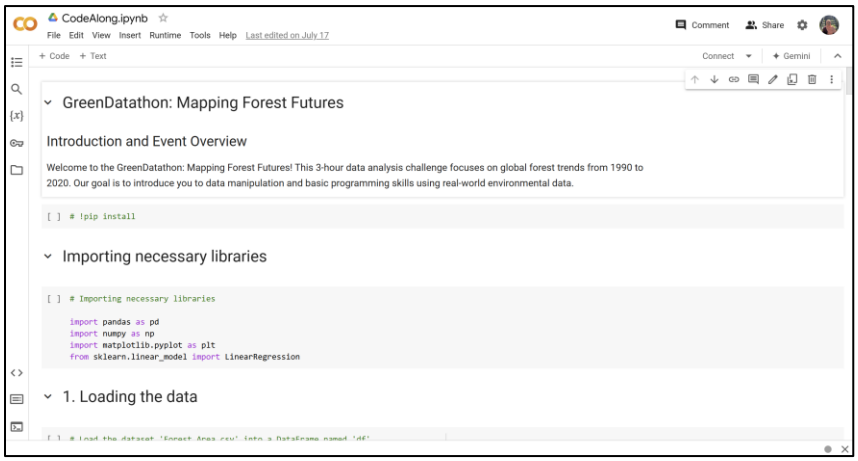

Fig 8: Code-Along code snippet