

Call for Project|Seminar Work

Preliminary title: Develop a Data Science Game

Motivation: The motivation for this seminar work stems from the potential of gamified learning to make data science concepts more accessible and engaging. By transforming traditional data science education into interactive games, we can foster a deeper understanding of complex topics while maintaining high levels of participant interest and engagement. Such games allow to grasp the idea of practical application without the need of programming skills, preparing participants for real-world data science challenges. This approach should not only demystify abstract concepts but also enhances problem-solving and critical thinking skills in a fun and collaborative environment.



Figure 1: Enhance your data science skills.¹

Tasks: Explore data science games tailored for educational environments like the Data Storytelling Challenge, Data Detective, or Pattern Matrix Game (see Footnotes 1-2). Determine the most suitable game and modify it for the manufacturing sector, then craft a novel game for this domain.

Deliverable | Learning Outcomes:

- Report of minimum 8 pages about research on various strategy games
- Including aspects such as game preparation, required setup, and associated documentation

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¹ <https://concord.org/our-work/research-projects/data-science-games/>, last accessed 20.05.2024

² <https://www.kdnuggets.com/2019/03/top-8-data-science-use-cases-manufacturing.html>, last accessed 20.05.2024