Generative AI for Technical Design

Tuesday, 2nd September	
09.30	Arrivals, Coffee
10.00	Welcome, Workshop Outline and Housekeeping
10.05	Round of Introductions
10.30	Perspectives & Positions – invited presentations • **Allin Groom,** Principal Research Scientist, Industry Futures, Autodesk Research • **Andrew Sherlock,** Director of Data-driven Manufacturing, National Manufacturing Institute of Scotland (NMIS) • **Richard Coyne,** Professor of Architectural Computing, University of Edinburgh • **Tim Drysdale,** Chair in Technology Enhanced Science Education, University of Edinburgh • **Vaishak Belle,** Reader in Logic and Learning, University of Edinburgh (TBC) • **Jonathan Corney,** Chair of Digital Manufacturing, University of Edinburgh
11.30	Coffee
11.45	RAG-based Conversational CAD: Prototype Demo Sydney (Shuang Li)
12.00	Workshop Part 1: Open Prototyping Scope and Connect – Unpacking the Challenges of GenAI for Technical Design Working in 4 groups of 4-6 Matjaz Vidmar
13.00	Lunch, Networking, Interaction with RAG System
14.00	Workshop Part 2: Open Prototyping Play and Produce – Imagining Architectures Working in 4 groups of 4-6
15.00	Reporting Back from Groups
16.30	Wrap Up and Next Steps
16.00	End of day

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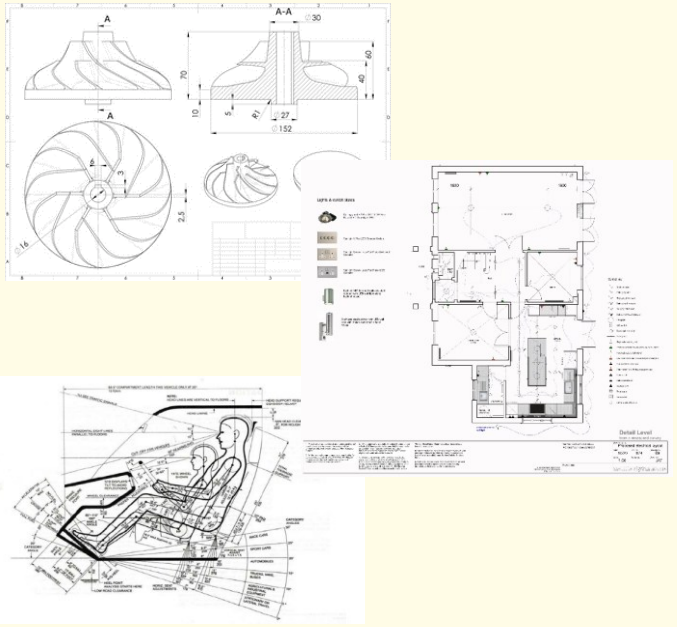
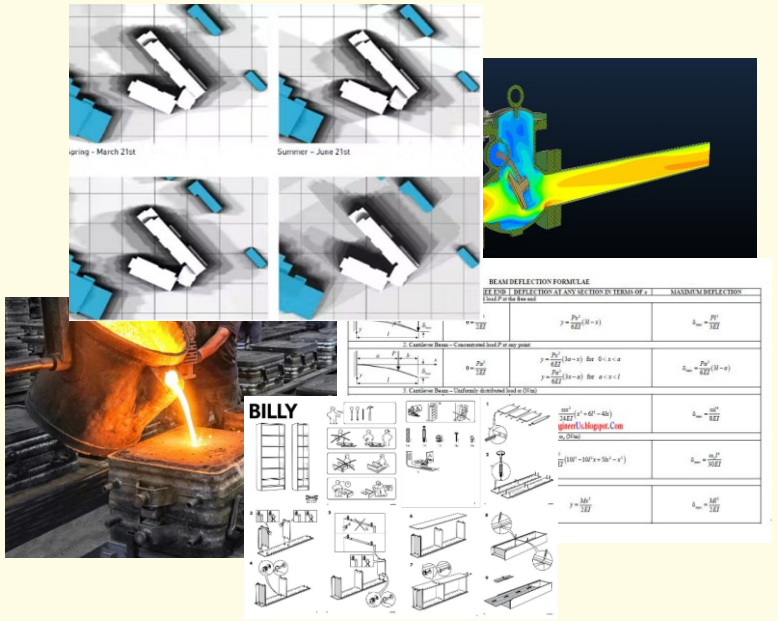
School of Engineering

Fire Safety Information
Toilets

GAIL Seed Project : Generative AI for Technical Design



Technical Design is a form of high value activity which is inherently **multi-modal** and could be loosely defined as defining shapes for functional purposes.



Inputs to technical design ranges from computational simulations, functional specifications and analytical equations
Outputs can be specifications like drawings and implementation instructions for construction or manufacture

GenAI for Technical Design SWOT:

- **Strengths**
- **Weaknesses**
- **Opportunities**
- **Threats**

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