WORKSHOP

Text-to-image generative AI tools for better learning and teaching

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WORKSHOP MODE

The workshop will be facilitated **in person.**

OVERVIEW OF WORKSHOP

Have you found yourself wasting hours searching for *the* image to make your teaching more engaging and inclusive for learners? This workshop is a collaborative hands-on introduction to using text-to-image generation (TTIG) to create custom-made digital images to capture your students' attention. Facilitators will also share ideas, active learning and teaching practices on applying TTIG in university courses.

ACTIVITIES

- **Introductions:** Generative AI (gen-AI) and how to use it responsibly now and in the future.

- **Image purpose:** We will explore types of images for communication through the learner lens… from showing abstract concepts to impossible scenes, and internal workings to detailed processes.

- **Image creation and citation:** Participants will create TTIG images through learning by doing… defining the subject, setting and style, then evaluating the output for optimal learning and teaching.

- **Image modifications:** The first image is just the start… participants will engineer prompts to modify their initial results, exploring their own creative range and that of the TTIG platform.

- **Image impact:** We will discuss TTIG images and storyboarding for Engineering Education.

- **Collaborative discussion:** Throughout the workshop, we will share and discuss using, e.g., Miro.

TARGET AUDIENCE

This workshop is for anyone who wants to make custom digital images for better learning and teaching. No prior knowledge is required. Each participant must bring a WiFi-capable laptop or tablet.

OUTCOMES

Participants will leave the workshop with improved knowledge, skills, tips and tricks in using TTIG platforms for better communication, teaching practice and quality education (SDG 4).

REFERENCE

Mahdavi Goloujeh, A., Sullivan, A., & Magerko, B. (2024, May). Is It AI or Is It Me? Understanding Users' Prompt Journey with Text-to-Image Generative AI Tools. In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1-13).

KEYWORDS

Generative artificial intelligence (gen-AI), text-to-image generation (TTIG), learning, teaching, SDG 4

PRESENTERS' BACKGROUNDS

Dr Andrea Kolb and Amanda Di Ienno are Professional Teaching Fellows with the Chemical & Materials Engineering Department at the University of Auckland (UoA). They are experienced in facilitating learning in diverse, large and small cohorts across the UoA's BE(Hons) programme.

Dr Mark Jeunnette is the Director of Engineering Design and a Senior Lecturer at UoA. He oversees the development of engineering design process skills in all engineering undergraduate students at UoA.