Wave Function Collapse for Graph Generation

In this project, our goal is to explore the application of the Wave Function Collapse (WFC) algorithm for graph generation. This algorithm, originally designed for procedural content generation in games, can be adapted for graph generation. See WFC demo: link1, link2. We seek highly motivated students with a strong interest in graph theory, algorithms, and procedural content generation.

Graph generation has diverse applications in pharmacy and pharmaceutical sciences, ranging from drug discovery and development to personalized medicine and healthcare analytics.

Requirements: Strong programming skills in languages such as Python and C/C++, along with a high level of motivation. Having prior experience working with procedural content generation and graphs is advantageous.

We will have weekly meetings to address questions together, discuss progress, and think about future ideas.

Contact

In a few short sentences, please tell us why you are interested in the project and about your coding and background (i.e., your own projects or courses).

- Till Aczel: taczel@ethz.ch, ETZ G60.1
- Joël Mathys: jmathys@ethz.ch, ETZ G63