

Dynamic particle simulations using GPUs

- This project focuses on the efficient processing and management of a dynamic number of particles using GPUs. It assumes a good understanding of C++ and some experience with CUDA or other GPU compute frameworks.
- The primary objectives are dynamic particle management, enabling the seamless addition and removal of particles; the development of an efficient processing system capable of handling multiple control paths to model complex behaviors; and conducting a comprehensive performance and efficiency analysis to benchmark and optimize the implementation.
- We both have GPUs as part of a larger HPC system at DTU, which are available for use. However, the project is also open to use local GPUs in personal computers.

Supervisors are Sven Karlsson and Mathias Gammelmark. If you're interested, please write an email to magam@dtu.dk

