

EPFL Master Internship Computer Graphics

(M/W) 100%

The cutting tools necessary for manufacturing smartphones, tablets, aircraft, cars and medical devices are high-tech products made on high-precision machines with high-performance software. Rollomatic designs, manufactures, markets, and maintains these production systems worldwide with nearly 400 employees.

THEME OF THE WORK:

"VISUALIZATION AND OPTIMIZATION OF SIMULATION METHODS FOR SUBSTRUCTIVE MANUFACTURING"

YOUR PROFILE:

- Master student in Computer Science, Applied Mathematics or related field for a full-time intern position
- Strong interest in 3D Computer Graphics and Computational Geometry
- Good programming skills with low-level languages (C++/Rust, OpenCL/OpenGL/CUDA)
- Enthusiasm in designing advanced algorithms and using sophisticated data structures
- Motivation for engineering application in the heart of Swiss-made high-precision industry

YOUR MISSION:

- Improve the performance of high precision industrial grinding processes simulations
- Explore real-time visualization techniques
- Implementation in lower-level languages on modern hardware
- Quantify performances of proposed prototypes
- Collaborate with different teams within the company

YOUR TAKE:

- This project offers you the opportunity to immerse yourself in a unique environment that combines industrial aspects, the development of advanced methods and their implementation
- You will be integrated into a team of professional software developers and mathematicians, following modern agile working methodologies
- Your research and development work brings significant added value to our software solution for our users, contributing to the improvement of core algorithms
- Finally, this research work can possibly continue with a Master thesis, PhD project or employment at Rollomatic

WORKPLACE:

- Your workplace will be shared between EPFL Innovation Park and Rollomatic Headquarter (Le Landeron)
- Partial remote work possible

Application deadline: 30.11.2024

Are you interested in this challenge? Please send your application (EN or FR) at: celluleEPFL@rollomatic.ch



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