# EPFL Master Internship Applied Mathematics

(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:

# "RESEARCH ON THE DESIGN AND CONSTRUCTION OF GRINDING TRAJECTORIES"

## YOUR PROFILE:

- Master student in Applied Mathematics, Computational Science, or related field for a fulltime intern position
- Strong interest in Mathematical Modeling, Numerical Analysis, or Computational Geometry
- Good programming skills, familiarity with object-oriented programming concept is a plus
- Enthusiasm in exploring advanced algorithms for solving challenging problems
- Motivation for engineering application in the heart of Swiss-made high-precision industry

# YOUR MISSION:

- Explore innovative frameworks to design and construct grinding operations
- Generate trajectories to control the CNC machine axes
- Implement prototypes in C# or Python
- Elaborate metrics to evaluate the prototype performances
- 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 implementations
- You will be integrated into a team of professional software developers and mathematicians, following modern agile work 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: 31.05.2024

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



