

# EPFL Master Internship

## 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 350 employees.

### THEME OF THE WORK :

**“Research and implementation of numerical methods in differential geometry”**

### YOUR PROFILE :

- Master student in Applied Mathematics or a related field and looking for a full-time position as an intern
- Strong interest in one of the following domains: computational geometry, numerical analysis, differential geometry, machine learning
- Good programming skills, familiarity with object-oriented programming is a plus
- Enthusiasm in understanding and applying advanced mathematical tools
- Motivation for engineering application in the heart of Swiss-made high-precision industry

### YOUR MISSION :

- Explore innovative frameworks and methods to characterize grinding operations
- Generate trajectories to control machine axis during grinding
- Explore applications of Machine Learning techniques
- Implementation of these concepts in C# or another programming language
- Collaborate with different teams within the company

### OPPORTUNITIES :

- This internship project offers you the opportunity to immerse yourself in a unique environment that combines industrial aspects, the development of advanced applied mathematical 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

### PLACE OF WORK :

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

Application deadline: 31.05.2023

Are you interested in this challenge? Please send your confidential application (EN or FR) to Mr. Jonathan Rochat at [j.rochat@rollomatic.ch](mailto:j.rochat@rollomatic.ch)