

SIMONE SERAFINO

ACTUAL POSITION

Simone Serafino is a third-year PhD student at the University of Genoa. The PhD course is IMEG (Mechanical, Energy and Management Engineering) and the curriculum is Robotics and Mechatronics. His tutor is Prof. Matteo Verotti and his main research is based on the design and optimization of compliant mechanisms.

ACADEMIC STUDIES

- Master's Degree** University of Genoa, Mechanical Engineering (Design and Production), June 2021
Graduation Mark: 110/110
Thesis Title: Analysis and Optimization of a flexible joint: Cross Axis with curvilinear beams
Thesis Subject: Compliant Mechanism Optimization
Thesis Supervisor: Prof. Ing. Pietro Fanghella, Prof. Ing. Matteo Verotti
- Bachelor's Degree** University of Genoa, Mechanical Engineering, February 2019
Graduation Mark: 101/110
Thesis Title: Modeling and 3D printing of a planetary gear train
Thesis Subject: Parametric design of a planetary gear, with subsequent affination of the model for 3D printing
Thesis Supervisor: Prof. Ing. Pietro Fanghella

LANGUAGES

Italian: Mother Tongue

English: Basic Level

TECNOLOGICAL SKILLS

- Ansys APDL, Ansys Workbench
- PTC Creo
- Recurdyn
- Microstation
- Matlab
- Anylogic
- C++
- Office Automation

CERTIFICATION

RSPP Prevention, Protection and Safety Responsible

June 2018

PUBLICATIONS

1. Serafino, S., P. Fanghella, and M. Verotti. "Initial curvature and centroid positioning effects on cross-axis flexural pivots accuracy." *Mechanism and Machine Theory* 177 (2022): 105039
2. M.Verotti, S. Serafino, P.Fanghella. "Position Accuracy Criteria for Flexural Hinges". *Precision Engineering* 80 (2023), 82-94
3. Serafino, S., P. Fanghella, and M. Verotti. "Accuracy of initially curved cross-axis flexural pivot". *Proceedings of the ASME IDETC/CIE 2022 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference IDET/CIE 2022*, session MR-03-04, paper 88255.
4. Serafino, S., P. Fanghella, and M. Verotti. "Design and testing of high-accuracy curved cross-axis flexural pivots with cable-driven actuation." *Mechanism and Machine Theory* 189 (2023): 105418.
5. Serafino, S., P. Fanghella, and M. Verotti. "Effect of cross-axis orientation on accuracy performance of compliant mechanism". *Proceedings of the ASME IDETC/CIE 2023 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference IDET/CIE 2023*, session MR-03-02, paper 115226.