

# Francesco Serafini

### Education

- 2020- PhD in Theoretical and Applied Mechanics, "Sapienza" University of Rome.
- 2018–2020 Master in Aeronautical Engineering, "Sapienza" University of Rome, Graduation date: 26/10/2020, Final result: 110/110 cum laude, Thesis title: Turbulent flows of dilute polymer solutions.
- 2015–2018 **Bachelor in Aerospace Engineering**, "Sapienza" University of Rome, Graduation date: 07/11/2018, Final result: 110/110 cum laude, Thesis title: Optimization of the front wing for an open wheel car.
- 2010–2015 **Secondary School Diploma**, *Liceo Scientifico "Louis Pasteur"*, Rome, Final result: 100/100.

## Additional Education/Teamwork Experiences

- 2019 Association for Unmanned Vehicle Systems International, Student Unmanned Aerial Systems Competition (AUVSI SUAS), Maryland, USA, Partecipated with the Sapienza Technology student Team.
- 2018-2019 Sapienza Technology Team (STT) Student Team, Technical Lead: project coordination for the design, assembly and mission analysis of an unmanned rover model for the AUVSI SUAS student competition.
  - 2018 Participated at Formula Student Italy and Formula student Spain events with Sapienza Fast Charge, as responsible of the aerodynamic division.
  - 2017 Participated at Formula Student Italy and Formula student Spain events with Sapienza Fast Charge, as member of the aerodynamic division.
- 2016-2018 **Sapienza Fast Charge Formula Student Team**, *Member of the aerodynamic division: responsible of front wing design and CFD analysis of the car.*

#### Languages

Italian Native

English Level C1 (CAE): Certificate in Advanced English (2014)

#### Research area

Turbulent flows: effects of long polymer chains on turbulent drag and turbulent sustaining mechanism

#### Technical skills

Good knowledge of Computational Fluid Dynamics

Good knowledge of Numerical methods for Polymer Dynamics

# Computer skills

Good knowledge of Fortran, Matlab, Mathematica, Python

Good knowledge of Linux, Windows, Late $\chi$ , Microsoft Office

Good knowledge of parallel computing (openMP, MPI)