

# **Luca Di Stasio**

## **Early Stage Researcher**

D-CPR Certified (FR, SE)

Driver License Cat. B (IT)

Italian & EU citizen

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## **Computer Skills** -

Operating Systems
Linux (Ubuntu, OpenSUSE, CentOS)
Windows (>95), Mac OS X (>10.6)

Languages C, C++, Python, Perl, Java, Fortran VBA, Javascript, HTML(5), CSS Bash, Windows Batch Scripting

High Performance Computing OpenMP, MPI, CUDA, OpenACC

Scientific Computing & Statistics Numpy, Scipy, R, Stata Matlab, Mathematica, Octave, Maple Excel, G-Sheets, LibreOffice Calc

CAD, CAM, CAE
Autocad, Solid Edge, G-code
Abaqus, Ansys, Comsol Multiphysics
CalculiX, FEniCS, Code\_Aster
OpenFOAM, Thermal Desktop

Web Development
AJAX, JQuery, Bootstrap, Angular
React, D3, Node.js, Npm

Oatabases
SQL, MongoDB

</> Versioning Git, Github

Writing & Reporting Latex, Tikz, Beamer, Word, Powerpoint

## **Work Experience**

### Research & Development

currently **Early stage researcher**Luleå tekniska universitet (Luleå, Sweden)

Polymeric Composite Materials Group, TVM

Project(s): Mechanics of extreme thin composite layers for aerospace applications,

Effect of aging on transverse cracking in GFRPC, Temperature and loading rate effect on transverse cracking in GFRPC Working language(s): Swedish, English

2015 - **Early stage researcher** Université de Lorraine (Nancy, France)

2017 Mechanics of Materials Group, SI2M, IJL

\*Project(s): Mechanics of extreme thin composite layers for aerospace applications

\*Working language(s): French, English

2013 - **Early stage researcher** ETH Zürich (Zürich, Switzerland)

2015 Computational Physics for Engineering Materials Group, D-BAUG Projects: Fluid-structure interaction on deformable surfaces, Multi-scale modeling of wood

Working language(s): German, English

2012 - **Research assistant** IMDEA Materials Institute (Madrid, Spain)

2013 Structural Composites Group

Project(s): Loading rate effects on interlaminar fracture toughness in advanced CFRP.

Working language(s): Spanish, English

2012 **Research assistant** Drexel University (Philadelphia, USA) Mesoscale Materials Laboratory & BioMechanics Laboratory

*Project(s)*: Design of nano-resonators for environmental electromagnetic field detection, Talus morphology and its relationship to the kinematics of the ankle joint.

Working language(s): English

### Teaching & Supervision

currently **University Teaching Assistant** Luleå tekniska universitet (Luleå, Sweden) *Subjects*: Elasticity, Rheological models, Fracture mechanics, Experimental methods, Mechanics of Composite Materials, Laminate Analysis, Finite Element Method. *Working language(s)*: English

2016 - **University Teaching Assistant** Université de Lorraine (Nancy, France)

2017 *Subjects*: Mechanics of materials, Elasticity, Rheological models, Fracture mechanics, Experimental methods, Mechanics of Composite Materials, Finite Element Method

Working language(s): French

2014 - **Tutor** The Learning Center Zürich (Zürich, Switzerland)

2015 *Subjects*: Mathematics, Physics, Statistics, Econometrics, Java programming *Working language(s)*: German, English

2011 **Tutor** Politecnico di Milano (Milano, Italy)

Subjects: Calculus

Working language(s): Italian

2009 - **Tutor** Scientific High School Istituto Sacro Cuore (Milano, Italy)

2011 Subjects: Mathematics, Physics, Biology, Italian Language and Literature, Latin Language and Literature, History

Working language(s): Italian

### Institutional and Administrative Activities

2019 CompTest 2019 organising committee (Luleå, Sweden)
9th International Conference on Composite testing and model identification
Design and creation of interactive book of abstracts, creation and design of
conference proceedings website

Working language(s): English
 2008 - Student Representative Politecnico di Milano (Milano, Italy)
 Student representative in the board of the Department of Aerospace Engineering

and in the board of the School of Industrial Engineering at Politecnico di Milano *Working language(s)*: Italian

### Volunteer Work

### currently **Instructor**

The Carpentries (CA, USA)

Conducting workshops to teach foundational coding and data science skills (Unix Shell, Git, Python, R) to researchers

Working language(s): English

## **Technical Skills** -

- Mechanical & Electrical Engineering Creation of Drawings & Specifications Circuit Design & Assembly Milling, Turning, Drilling, Welding Operating CNC & Precision Machines
- Composites Science & Technology
  Hand layup, Resin Molding & Casting
  Specimen Cutting & Polishing
  UTM Testing, Strain Measurements
  Optical & Digital Microscopy, SEM
- Project Management Goals & Specifications Formulation Planning, Scheduling & Supervision Funding & Budgeting
- Technical Writing & Communication Technical Reports, Scientific Articles Seminar & Conference Presentations Meeting, Video-Conferencing

## Languages

Italian (mother tongue)

Speaking
Writing
Reading

English (fluent)

Speaking
Writing
Reading

French (fluent)

Reading • • • •

Spanish (fluent)

Speaking
Writing
Reading

German (satisfactory)

Speaking
Writing
Reading

Swedish (rudimentary)

Speaking
Writing
Reading

Russian (rudimentary)

Speaking
Writing
Reading

## **Education**

### **Higher Education**

2015 - Joint European Doctor of Philosophy Degree in Advanced Materials Science and Engineering (DocMASE)
 (exp.) Luleå tekniska universitet (Luleå, Sweden) and Universitè de Lorraine (Nancy, France)
 PhD in Polymeric Composite Materials (exp. 2019) Luleå tekniska universitet

PhD in Polymeric Composite Materials (exp. 2019), Luleå tekniska universitet PhD in Materials Science & Engineering (exp. 2019), Universitè de Lorraine Working language(s): English, French, Swedish

2013 Professional License, Industrial Engineering

Politecnico di Milano (Milano, Italy) Working language(s): Italian

2010 - Double Master of Science degree EAGLES (Engineers as Global Leaders

2013 for Energy Sustainability)

Politecnico di Milano (Milano, Italy), Drexel University (Philadelphia, USA) and Universidad Politécnica de Madrid (Madrid, Spain)

MSc in Space Engineering, 110/110 (2013), Politecnico di Milano MSc in Mechanical Engineering, 4/4 (2012), Drexel University Working language(s): Italian, English, Spanish

2007 - Bachelor of Science in Aerospace Engineering, 110/110

2010 Politecnico di Milano (Milano, Italy) Working languages(s): Italian

2002 - Scientific High School Diploma, 100/100 cum Laude

2007 Scientific High School Istituto Sacro Cuore (Milano, Italy)

Working languages(s): Italian

1997 - Cello Studies

2007 Municipal School of Music (Cernusco s/N, Italy)

Working language(s): Italian

### **Selected Courses & Seminars**

2018 - Qualifying Course for University Teachers

2019 Luleå tekniska universitet (Luleå, Sweden)

In-Class Course and Verified Certificate of Completion

Working language(s): English

2017 Software Carpentry Instructor Training Program

The Carpentries (California, USA)

Remote Interactive Course and Certificate of Completion

Working language(s): English

2016 **Project Management MOOC - Classic Course** 

Centrale Lille and Unow (Lille, France)

Online MOOC and Certificate of Completion

Working language(s): French

2015 Corporate Social Responsibility (CSR) and Value Creation

Audencia Nantes Business School (Nantes, France)

Online MOOC and Verified Certificate of Completion

Working language(s): English

2015 **2015 Summer School on Effective High Performance Computing** 

CSCS and Universitá della Svizzera Italiana (Lugano, Switzerland)
In-Class Course, Hands-on Training and Certificate of Completion
Working language(s): English

### **Vocational Training**

2009 CNC Technician

Centro di Formazione Professionale Salesiano Don Bosco (Milano, Italy)
In-Class Course, Hands-on Training and Certificate of Competence
Working language(s): Italian

## **Memberships**

Since Ordine degli Ingegneri della Provincia di Milano (Society of Licensed 2014 Engineers of Milan)

Since The Carpentries 2017

## References

- ✓ Prof. Janis Varna (supervisor) Luleå tekniska universitet (Luleå, SE) janis.varna@ltu.se
- Prof. Zoubir Ayadi (supervisor) Universitè de Lorraine (Nancy, FR) zoubir.ayadi@univ-lorraine.fr
- Dr. Johanna Xu (former colleague) Chalmers tekniska högskola (Göteborg, SE) johannax@chalmers.se

## **Honors & Awards**

### 2019 Wallenberg Jubileumsanslaget Travel Grant

Knut and Alice Wallenberg Foundation

Travel expenses for the participation to the 12th International Conference on Composite Science and Technology

### 2015 - Erasmus Mundus Fellowship

2018 European Commission

Salary and travel expenses for the participation to the *Joint European Doctoral Programme in Advanced Materials Science and Engineering (DocMASE)* 

### 2015 Academic Excellence Award

BCC (Banca di Credito Cooperativo) di Cernusco s/N (now BCC di Milano) (Milano, Italy) Award for excellence in graduate studies at Politecnico di Milano (Milano, Italy)

#### 2013 **PEGASUS award**

PEGASUS - The European Network of Excellence in Aerospace Engineering Education Statement of recognition of special achievements in European cooperation through working abroad for academic research or industrial development projects

### 2012 - Erasmus Fellowship

2013 European Commission

Salary and travel expenses to conduct a research project at IMDEA Materials Institute (Madrid, Spain), as part of the *Double Master Degree Program EAGLES* (Engineers as Global Leaders for Energy Sustainability)

### 2011 - EU-US Atlantis Program Fellowship

2012 European Commission and U.S. Department of Education

Full tuition, salary and travel expenses to conduct graduate studies at Drexel University (Philadelphia, USA), as part of the *Double Master Degree Program EAGLES (Engineers as Global Leaders for Energy Sustainability)* 

#### 2012 Academic Excellence Award

BCC (Banca di Credito Cooperativo) di Cernusco s/N (now BCC di Milano) (Milano, Italy) Award for excellence in undergraduate studies at Politecnico di Milano (Milano, Italy)

#### 2007 - Merit-based tuition fees exemption

2010 Politecnico di Milano (Milano, Italy)

Merit-based partial exemption from tuition fees to conduct undergraduate studies at Politecnico di Milano (Milano, Italy)

### 2007 Academic Excellence Award

BCC (Banca di Credito Cooperativo) di Cernusco s/N (now BCC di Milano) (Milano, Italy) Award for excellence in high school studies at Scientific High School Istituto Sacro Cuore (Milano, Italy)

### 2007 Academic Excellence Award

Ministero dell'Istruzione, dell'Università e della Ricerca (Italian government)

Award for excellence in high school studies at Scientific High School Istituto Sacro

Cuore (Milano, Italy)