



# Luca Di Stasio

## *Curriculum Vitae*

### Work contact information

*Address* ETH Zürich, Institut für Baustoffe (IfB), HIF E18  
Stefano-Franscini-Platz, 3 - 8093 Zürich, Switzerland  
*Phone* (CH) +41 44 633 68 26  
*Email* luca.distasio@ingpec.eu  
luca.distasio@ifb.baug.ethz.ch  
*Webpage* [www.ifb.ethz.ch/comphys/people/lucad](http://www.ifb.ethz.ch/comphys/people/lucad)

### Personal contact information

*Address* Bruggerweg, 17 - 8037, Zürich, Switzerland  
*Mobile* (CH) +41 076 516 87 84  
(IT) +39 392 16 73 742  
*Email* luca.distasio@gmail.com  
*Webpage* [www.lucadistasioengineering.com](http://www.lucadistasioengineering.com)  
[www.linkedin.com/profile](https://www.linkedin.com/profile)

### Other personal information

*Nationality* Italian  
*Visa* Swiss B permit (5-years residence permit)  
*Place of birth* Cernusco sul Naviglio, Milano, Italy  
*Date of birth* April 19<sup>th</sup>, 1988  
*Marital status* Single

---

## Work experience

### Research

- Sep. 2013 - Present **Research assistant**, *Computational Physics for Engineering Materials group*.  
*Institute for Building Materials, Department of Civil, Environmental and Geomatic Engineering, ETH Zürich*  
Zürich, Switzerland
- Currently, I am focusing on *multi-scale modeling of wood* for the determination of macroscopic mechanical properties. I previously worked on the research project *Fluid-structure interaction on deformable surfaces*.

### Teaching

- 2009 - 2011 **Tutor**, *Scientific High School Istituto Sacro Cuore*, Milano, Italy.  
I worked as a teacher of extracurricular activities of tutoring for high school students.

### Miscellaneous

- 2008 - 2011 **Sound Technician**, *CLU (catholic association)*, Milano, Italy.  
As part of a non-for-profit catholic association, I worked on a voluntary basis as sound technician in the preparation of meetings and events.
- 2008 - 2011 **Secretary**, *CLU (catholic association)*, Milano, Italy.  
As part of a non-for-profit catholic association, I worked on a voluntary basis as secretary helping in ordinary administration, accounting, event planning and management.
- 2007 - 2009 **Driver**, *ADT*, Cernusco s/N, Milano, Italy.  
I worked for a family-owned business of road transports as a driver.
- 2005 - 2007 **Worker**, *Delta I Srl.*, Cernusco s/N, Milano, Italy.  
I worked for a family-owned business of electro-mechanical systems, where I learnt to use a series of different machines.

---

## Research activities and interests

- Present As research assistant in the Computational Physics for Engineering Materials group, Institute for Building Materials, ETH Zürich, I am working on the project *Multi-scale modeling of wood*.
- 2013 - 2014 As research assistant in the Computational Physics for Engineering Materials group, Institute for Building Materials, ETH Zürich, I worked on the project *Fluid-structure interaction on deformable surfaces*.
- 2012 - 2013 I worked at IMDEA Materials under the supervision of Dr. Claudio Lopés. The focus of the project was the study of loading rate effects on propagation of delamination (mode I, mode II and mixed mode I-II) in advanced FRP laminated composites.
- Jan.-Jun. 2012 I joined the research group of Dr. Jonathan Spanier, Department of Materials Science & Engineering, Drexel University. I worked on a project related to the development of a NEMS sensor for environmental electromagnetic field detection, based on elasto-magnetic coupling effects.
- Jan.-Jun. 2012 I worked with Dr. Sorin Siegler, Department of Mechanical Engineering & Mechanics, Drexel University, on the project *Morphological properties of the talus and their relationship to the kinematics of the ankle joint*.

---

## Education and courses

### Higher education

- Nov. 2013 **Italian Professional Engineer License in Industrial Engineering.**  
*Politecnico di Milano*  
Milano, Italy
- 2010 - 2013 **Double degree project EAGLES (*Engineers as Global Leaders for Energy Sustainability*).**  
*Politecnico di Milano - Drexel University - Universidad Politécnica de Madrid*  
Milano, Italy - Philadelphia, USA - Madrid, Spain
- ✓ At Politecnico di Milano I graduated in October 2013, obtaining the **M.Sc. Degree in Space Engineering**, with final mark of *110/110*.
- ✓ At Drexel University I graduated in June 2012, obtaining the **M.Sc. Degree in Mechanical Engineering and Mechanics** with overall GPA of *4/4*
- ✓ As student of Universidad Politécnica de Madrid, I worked on a research project at *IMDEA Materials (Madrid Institute for Advanced Studies)*. The project fulfilled the requirements for the Master thesis work to complete the M.Sc. in Space Engineering. The thesis title was *Experimental, Analytical and Numerical Investigation of Loading Rate Effects on Mode I, Mode II and Mixed Mode I-II Delamination in Advanced CFRP*.
- 2007 - 2010 **Bachelor of Science in Aerospace Engineering, 110/110.**  
*Politecnico di Milano - Milano, Italy*
- 2002 - 2007 **High School Diploma, 100/100 cum Laude.**  
*Scientific High School Istituto Sacro Cuore - Milano, Italy*
- ### Courses and seminars
- Mar. - Jun. **History, Present and Future of the European Union (School of European Citizenship).**
- 2013 Held by *CEPADE - Universidad Politécnica de Madrid*, Madrid, Spain
- To mark the *2013 European Year of Citizens*, the course offered a deep insight into the history and political development, the current institutional framework and future perspectives of the European Union.
- July 2012 **2012 Wolfram Science Summer School.**
- Held by *Wolfram Research*
- Hosted by Curry College, Milton, MA, USA
- Learning activities were focused on the acquisition of a deep knowledge of Mathematica software and programming language. The personal project *Modeling Complex Patterns of Crack Propagation: Branching and Merging Mechanisms* was developed with the use of Mathematica.
- August 2011 **Shanghai Summer School.**
- Held by *China Engineering Education Excellence Alliance*
- Hosted by Tongji University, Shanghai, China – Northwestern Polytechnical University, Xián, China – Chongqing University, Chongqing, China

Main topics covered were urban development, international communication, sustainable development of urban and rural areas, Chinese language and culture.

March 2010 **ATHENS Programme (Advanced Technology Higher Education Network/Socrates).**

Held and hosted by *Delft University of Technology*, Delft, Netherlands

Participation to the intensive course *Introduction into Finite Elements*, on foundations and introductory programming of FEM.

#### Vocational training

Jul. - Dec. **Professional training course on manufacturing technologies.**

2009 Held and hosted by *Centro di Formazione Professionale Salesiano Don Bosco*, Milano, Italy

Lectures and practical training on milling, turning, welding, programming and use of CNC machines.

---

#### Institutional activities

2008 - 2011 Student representative in the board of the Department of Aerospace Engineering at Politecnico di Milano.

2008 - 2011 Student representative in the board of the School of Industrial Engineering at Politecnico di Milano.

---

#### Honors and awards

Oct. 2013 *PEGASUS award*, for special achievements in european cooperation.

2012 - 2013 *Erasmus program*, stipend award for research period at IMDEA Materials.

2011 - 2012 *EU-Atlantis grant provided by US Department of Education and European Commission*, full tuition and stipend award for graduate studies at Drexel University.

March 2012 *BCC (Banca di Credito Cooperativo) di Cernusco s/N*, scholarship award for excellence in undergraduate studies.

2007 - 2010 *Politecnico di Milano*, partial tuition coverage for undergraduate studies.

March 2008 *BCC (Banca di Credito Cooperativo) di Cernusco s/N*, scholarship award for excellence in high school studies.

Sept. 2007 *Italian Government*, scholarship award for excellence in high school studies.

---

#### Professional affiliations

Full member of *Ordine degli Ingegneri di Milano*

Student member of the *American Society of Mechanical Engineers (ASME)*

Student member of the *Society of Industrial and Applied Mathematics (SIAM)*

Student member of the *Institute of Electrical and Electronics Engineers (IEEE)*

Student member of the *Swiss Physical Society (SPS)*

---

## Language skills

Italian **Mother tongue**

English **Proficient**

Excellent reading and listening skills, excellent abilities in written and oral communication.

In May 2012 I obtained the **IELTS Certificate** with *overall band score of 8.5/9.0*, corresponding to level C2 of the Common European Framework.

In September 2010 I obtained the TOEIC Certificate with grade of 945/990, corresponding to level C1 of the Common European Framework.

In 2006 I obtained the FCE of Cambridge University, corresponding to level B2 of the Common European Framework.

Spanish **Intermediate**

Very good reading and listening skills, good abilities in written and oral communications.

German **Fair**

Average reading skills, basic abilities in written and oral communication.

In 2002 I obtained the Fit in Deutsch 1 of Goethe Institut, corresponding to level A1 of the Common European Framework.

Russian **Fair**

Average reading skills, average abilities in written and oral communication.

From October 2010 to May 2011 I attended a course of Russian held by Associazione Italia-Russia - Milano, Italy, officially recognized by the Russian embassy.

Chinese **Basic**

In August 2011, I studied the basics of Chinese language during the Shanghai Summer School.

---

## Computer skills

*Operative systems:* Windows, Linux, Mac OS.

*Programming languages:* C, C++, Python, Perl, Fortran, HTML, bash.

*Scientific computing:* MatLab, Mathematica, Octave, Maple.

*Physical modeling and simulation:* Abaqus, Comsol Multiphysics, Thermal Desktop.

*CAD/CAM softwares:* Autocad, Solid Edge.

*Document preparation:* LaTeX, JabRef, EndNote.

*General purpose softwares:* Office package (Word, Excel, Powerpoint) and equivalents, Internet browsers (Google Chrome, Firefox, Internet Explorer), PDF creation and modification, image processing.

## Personal interests

From 1997 to 2007 I studied Cello at Scuola Civica di Musica of Cernusco sul Naviglio, Milano, Italy. I am currently learning to play guitar in my spare time.

I am interested in politics and finance. I love reading, especially classics; listen to both classical and contemporary music; I am fond of theatre and movies. I am deeply interested in painting and sculpture, and generally in arts. I love sports, I often play soccer and regularly enjoy physical activities.

I am regularly involved in voluntary work. In Philadelphia, I took part in the activities of Philabundance, devoted to the collection of food for people in need. While in Madrid, I joined charitable works for homeless people. In Zürich, I participated in gratuitous activities of child-caring.

## Driving licenses

Italian driving license cat. B