# LUCA DI STASIO

## **Postdoctoral Researcher**

Discovery Boulevard, G-3900, KAUST, Thuwal, Saudi Arabia

Italian & EU Citizen

Driving License B (IT)

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luca.distasio@gmail.com

**PROFILE** 

Scientific researcher and software simulation engineer, I'm a creative problem-solver and challengedriven. Experienced in managing R&D projects from conception to exploitation, both as leader and collaborator.

## **EMPLOYMENT HISTORY**

KAUST Thuwal, Saudi Arabia

Apr 2020 - Present **Postdoctoral Researcher** (with Prof. Brian Moran)

- Led the development of multiple research projects from idea to publication in the field of large deformation elasticity of cracked Neo-Hookean bodies
- Developed automated software pipelines for the semi- and un-supervised generation and analysis of numerical models (mesh generation, CSM/CFD simulation, data analysis)
- o Developed routines for the visualization of multi-dimensional data
- o Disseminated results through the publication of journal articles
- o Presented results at international conferences

#### Université de Lorraine

Nancy, France

Sep 2020 – Feb 2021 Guest Lecturer

- Established learning objectives, formulated assessment methods and designed learning activities of a Solid Mechanics course for 2<sup>nd</sup> year undergraduate students in Materials Science and Engineering delivered online
- o Delivered learning activities, provided extra-curricular support, assessed the achievement of learning outcomes
- o Managed remotely a team of 5 teaching assistants

## LULEA UNIVERSITY OF TECHNOLOGY

Luleå, Sweden

Jan 2018 – Dec 2019 Early-stage Researcher (with Prof. Janis Varna)

- o Completed successfully an international research project between institutions in France, Sweden, and Germany
- O Developed automated software pipelines for the semi- and un-supervised generation and analysis of numerical models (mesh generation, CSM/Fracture Mechanics simulation, data analysis)
- o Co-supervised master students' research projects
- o Disseminated results through the publication of journal articles
- o Presented results at international conferences and seminars

#### Université de Lorraine

Nancy, France

Sep 2015 – Dec 2017 **Early-stage Researcher** (with Prof. Zoubir Ayadi)

- O Kickstarted an international research project (between institutions in France, Sweden and Germany)
- O Developed automated software pipelines for the semi- and un-supervised generation and analysis of numerical models (mesh generation, CSM/Fracture Mechanics simulation, data analysis)
- O Presented results at international conferences and seminars

ETH ZÜRICH Zürich, Switzerland

Sep 2013 – Aug 2015 **R&D Engineer** (with Prof. Hans Herrmann)

- o Participated to the development of a coupled LBM-FEM code for staggered fluid-structure interaction
- Optimized the performance of an in-house code for multi-scale modeling of wood

### **IMDEA MATERIALS INSTITUTE**

Madrid, Spain

Nov 2012 – Aug 2013 **Research Assistant** (with Dr. Claudio Lopes)

- o Organized and completed successfully an international research project between institutions in Italy and Spain
- o Independently designed and conducted a series of mechanical tests to address the effect of loading rate on composites
- o Developed CAE models and conducted FEM analysis of the experiments
- Implemented routines for feature detection and extraction of Fracture Mechanics parameters from video recordings of experiments

EDUCATION					
Sep 2015 – Dec 2019	РнД	POLYMERIC COMPOSITE MA	TERIALS		
	Luleå Uni	VERSITY OF TECHNOLOGY		Luleå, Sweden	
Sep 2015 – Dec 2019	PHD MATERIALS SCIENCE				
N. 2012				Nancy, France	
Nov 2013		PE INDUSTRIAL ENGINEERING POLITECNICO DI MILANO			
Oct 2010 – Oct 2013	MSC SPACE ENGINEERING GPA 110/110		Milano, Italy  PA 110/110		
	POLITECNICO DI MILANO			Milano, Italy	
Sep 2011 – Jun 2012	MSC Drexel Un	MECHANICAL ENGINEERING	G	PA 4/4 Philadelphia, USA	
Sep 2007 – Sep 2010	BSC AEROSPACE ENGINEERING GPA 110/110		_		
3cp 2007 – 3cp 2010		POLITECNICO DI MILANO			
Professional Dev	ELOPMENT	(SELECTED)			
May 2021	STRUCTURING MACHINE LEARNING PROJECTS				
	DEEPLEARNING.AI (THROUGH COURSERA)  USA				
Apr 2021	NEURAL NETWORKS AND DEEP LEARNING				
	DEEPLEARNING.AI (THROUGH COURSERA)  USA				
May – Jul 2018		FUNDAMENTALS OF BUSINESS CERTIFICATE  QUANTIC SCHOOL OF BUSINESS AND TECHNOLOGY (PREVIOUSLY SMARTLY)  USA			
Mar 2018	RESEARCH FUNDING				
		IVERSITY OF TECHNOLOGY		Sweden	
Sep – Nov 2016	PROJECT MANAGEMENT				
	ECOLE CENTRALE LILLE France				
Jul 2015		VE EXPLOITATION OF HIGH I	PERFORMAN	NCE COMPUTING SYSTEMS Switzerland	
COMPUTER SKILLS	C++	Python Julia Fortran	R Matla		
	Shell Abaq	•		1	
SQL Git Java	script HTM	IL CSS VBA Excel	OpenMP	MPI CUDA OpenACC	
TECHNICAL SKILLS	Manu	facturing and testing of FRP	Operation	ng CNC and precision machines	
Milling, turning, drilling					
Optical and digital mi Project managem		1.		rain and stress measurements ical writing and communication	
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LANGUAGES	Italian	Native speaker	English	Highly proficient	
	French	Highly proficient	Spanish	Highly proficient	
	German	Working knowledge	Swedish	Working knowledge	