



## Alessandro Mei



### WORK EXPERIENCE

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#### Structural Engineer

**Freelance** [ 06/2019 – Current ]

City: Borgo San Lorenzo

Country: Italy

Preliminary design and optimization of steel structures. Both cold-formed and hot-rolled. Software development for structural computation and automatization.  
Static and seismic design of rack structures.

#### Design engineer

**Rosss S.p.A.** [ 02/2019 – 06/2019 ]

City: Scarperia e San Piero

Country: Italy

Preliminary Design, and project management of non standard racks: automatic, self-supporting, special requests. Static and Seismic design in accordance with NTC2018, EC1, EC3, EC8 and specialistic rack structures code: UNI EN 15512, UNI EN 16681.

#### Internship

**Rosss S.p.A.** [ 07/2018 – 02/2019 ]

City: Scarperia e San Piero

Country: Italy

Principles of rack structures FEM modeling, designing and verification of cold formed steel rack structures in accordance with UNI EN 15581, UNI EN 16681. Evaluation and interpretation of experimental tests on profiles and joints according to the UNI EN 15581.

### EDUCATION AND TRAINING

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#### Ph.D. in Structural Engineering

**Università degli Studi di Firenze/ Technische Universität Braunschweig** [ 11/2019 – 31/01/2023 ]

Address: 50139 Firenze (Italy)

Thesis: "Robustness of Automated Rack Supported Warehouses in Fires". Supervisors: Prof. Maurizio Orlando, Prof. Luca Salvatori, Prof. Paolo Spinelli, Univ-Prof. Klaus Thiele

As a part of the Ph.D. programme I spent a period abroad, studying and working at the Institute of Steel Construction in Braunschweig.

#### Master's Degree in Civil Engineering

**Università degli studi di Firenze** [ 09/2016 – 04/2019 ]

Address: 50139 Firenze (Italy)

Field(s) of study: Engineering, manufacturing and construction

Final grade: 110/110 cum laude

Thesis: "Incremental Dynamic Analyses and Non-Linear Static for Seismic Assessment of CFS Rack Structures".

Supervisors: Prof. Maurizio Orlando, Prof. Luca Salvatori, Federico Gusella PhD, Stefano Lombardi P.E., Claudio Pagani PhD.

## **Bachelor's Degree in Civil Engineering**

*Università degli studi di Firenze* [ 09/2011 – 07/2016 ]

Address: 50139 Firenze (Italy)

Field(s) of study: Engineering, manufacturing and construction: *Building and civil engineering*

Final grade: 96/110

Thesis: A comparison between the future regulation and the current one regarding cycle paths, a case study:

Pista Ecoturistica "Sieve". Supervisors: Prof. Eng. Lorenzo Domenichini, Eng. PhD. Monica Meocci.

## **LANGUAGE SKILLS**

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Mother tongue(s): **Italian**

**Other language(s):**

### **English**

**LISTENING C2 READING C2 WRITING B2**

**SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1**

### **Spanish**

**LISTENING A2 READING A2 WRITING A1**

**SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2**

## **DIGITAL SKILLS**

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### **Finite Element Software**

SAP2000 / Dlubal SHAPE-THIN / AbaqusCAE (Dassault Systemes) / PRO\_SAP / Strand7/ Straus7

### **CAD**

AbaqusCAE / AutoCAD 2D e 3D / SketchUp

### **Numerical Analysis**

Matlab

### **Miscellaneous**

Microsoft Excel / Microsoft Office / Microsoft Powerpoint / Google Drive / OZONE3 / Zoom / Microsoft Word / Google Docs / Skype

## **PUBLICATIONS**

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### **Mei, A., Orlando, M., Salvatori, L., Spinelli, P., Nonlinear static and incremental dynamic analyses for seismic down-aisle behavior of rack structures**

[2021]

INGEGNERIA SISMICA, vol. 38, pp. 21-45, ISSN:0393-1420

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### **Mei, A., Gusella, F., Orlando, M., A steel bracing system dissipating energy through moment-rotation hysteresis loops**

[2023]

Engineering Structures, Volume 280, 2023, 115640, ISSN 0141-0296

## CONFERENCES AND SEMINARS

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### **Fire and Blast Load on RC Structures**

[ Università degli studi di Napoli Federico II, 13/06/2020 – 16/06/2020 ]

*Attendee*

### **DigitalDays - giorno 3: Strutture in acciaio, secondo ordine ed effetti locali**

[ Webinar, 16/10/2020 – 16/10/2020 ]

*Attendee*

### **Structures In Fires 2020**

[ The University of Queensland, Australia (Online), 30/11/2020 – 02/12/2020 ]

*Attendee*

### **Advanced FDS/PyroSim Fire Modeling Workshop**

[ Online, 03/2021 – 04/2021 ]

*Attendee*

### **Advanced Finite Element Analysis with ABAQUS**

[ Online, 09/2021 – 11/2021 ]

*Attendee*

### **7th International Course on Seismic Analysis of Structures using OpenSees**

[ Politecnico di Torino, 05/07/2022 – 06/07/2022 ]

*Attendee*

### **XIX Convegno ANIDIS & XVII Convegno ASSISI**

[ Politecnico di Torino, 11/09/2022 – 15/09/2022 ]

*Speaker*

### **XXVIII Giornate Italiane della Costruzione in Acciaio**

[ Francavilla al Mare (Chieti), 29/09/2022 – 01/10/2022 ]

*Speaker*

## PROCEEDINGS

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### **Gusella, F., Mei, A., , Orlando, M., Analysis of the nonlinear behavior of closed built-up CFS sections in four-point bending**

[ 29/09/2022 – 01/10/2022 ]

XXVIII GIORNATE ITALIANE della COSTRUZIONE IN ACCIAIO, Francavilla al Mare

### **Mei, A., Orlando, M., Salvatori, L., On Numerical Modeling Of Collapse Of Steel Structures Exposed To Fire**

[ 29/09/2022 – 01/10/2022 ]

XXVIII GIORNATE ITALIANE della COSTRUZIONE IN ACCIAIO, Francavilla al Mare

### **Mei, A., Orlando, M., Salvatori, L., On the seismic response of rack structures affected by pinching**

Procedia Structural Integrity, Volume 44, 2023, Pages 2318-2325

### **Gusella, F., Mei, A., Orlando, M., An innovative ductile bracing system easily repairable after a seismic event**

Procedia Structural Integrity Volume 44, 2023, Pages 790-797

## MISCELLANEOUS

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### **Impresa Campus UNIFI, 2022 - II Call**

[ 09/2022 – Current ]

Currently in the second phase of the course.

### **Support activities for students of Structural Analysis and Design (Prof. M. Orlando)**

[ 11/2019 – Current ]

Sector ICAR/09

### **Support activities for students of Design of Structures (Prof. M. Orlando)**

[ 11/2019 – Current ]

Sector ICAR/09

### **Support activities for graduate students**

[ 11/2019 – Current ]

Valeria Lancia, Architectural and structural design of the "Pier Cironi" secondary school in Prato. Other supervisors: Prof. Maurizio Orlando, Prof. Frida Bazzocchi, Prof. Paolo Spinelli, Dr. Cecilia Ciacci.

Elena Mazzavillani, Colonia Varese in Milano Marittima. Historical analysis with feasibility proposal for a multifunctional center and seismic improvement project. Other supervisors: Prof. Maurizio Orlando, Stefano Bertagni PhD, Prof. Francesco Lensi.

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*According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.*

16/02/2023