

## ● EDUCATION AND TRAINING

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30/09/2015 – 16/10/2017 – via Eudossiana 18, Roma, Italy

**MASTER DEGREE IN ENERGY ENGINEERING - SCORE 109/110** – University of Rome, La Sapienza, Facoltà di Ingegneria Civile & Industriale

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**DIPLOMA IN SCIENTIFIC SUBJECT - SCORE OF 96/100** – Liceo of Rome “B.Russell”

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## ● WORK EXPERIENCE

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30/09/2019 – CURRENT – Roma, Italy

**PHD IN THERMAL MICROFLUIDIC DYNAMICS – WITHOUT PHD SCHOLARSHIP** – UNIVERSITY OF ROME LA SAPIENZA, DIMA

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- Velocity Measurement with Micro-PIV Techniques;
- Design new Microfluidic cells for Multiplanar Analysis;
- Set-Up of Thermal Analysis over Microfluidic devices;
- Studying of effect of different carrier fluids on heat transfer in a Microfluidic device;
- Evaluation of the Cooling Efficiency of Microfluidic devices;

31/08/2020 – CURRENT – Roma, Italy

**BIG DATA ANALYST – ACQUIRENTE UNICO SPA - GSE**

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- Management of Data Ingestion & Quality ;
- Automation of new processes identified by new Italian Energy Settlement rules;
- Management of the Italian Energy Settlement Processes like “Calculation of the Annual Consumption for the Gas Commodity (CA)” ;
- Maintenance of Oracle and Cloudera Data-structures;
- Management of Data Analysis Business Queries in the Italian Energy Market ;

31/08/2019 – 30/06/2020 – Roma, Italy

**ENERGY DEMAND FORECASTING ANALYST – ENEL ENERGIA**

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- Management of Energy Processes of Forecasting;
- Creating new statistical models for Electrical Energy Consumption in unusual situations (ex. Domestic Consumptions during Covid19 Pandemic)
- Set-Up New Energy Processes for Marketing;
- Cluster Analysis of Industrial Consumption Units into the Italian Market;
- Management of Interconnector with the PCE platform and relations with the different Shippers;
- Meeting with Top Energy Customers;

30/06/2018 – 30/08/2019 – Roma, Italy

**EXPERIMENTAL RESEARCH ASSISTANT – ISTITUTO DI INGEGNERIA DEL MARE - INM, CONSIGLIO NAZIONALE DELLE RICERCHE - CNR**

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- Experimental work in Cavitation Tunnel for the study of Counter Rotating Supercavitared Propellers;
- Velocity Measurement with Stereo PIV Techniques;
- Stress Analysis of Propellers under cavitation conditions;
- Creation of Data acquisition Interfaces for different experimental campaigns;
- Set-Up of the Cavitation Tunnel;

31/03/2018 – 29/06/2018 – Milano, Italy

## ENERGY EFFICIENCY OPERATOR – SIRAM SPA

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- Evaluation of capex & opex;
- Technical Analysis of Power Plants for Energy Efficiency Analysis;
- Cogeneration designing for Big Customers;

28/02/2017 – 31/08/2017 – Roma, Italy

## INTERNSHIP FOR MASTER DEGREE – UNIVERSITÀ OF ROME, LA SAPIENZA

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- Experimental investigation aimed at evaluating fluid dynamics and heat transfer models for a microfluidic cell, subject of the master thesis.

## ● LANGUAGE SKILLS

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Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C2	C1	C1	B2
<b>GERMAN</b>	A1	A1	A1	A1	A1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## ● DIGITAL SKILLS

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### My Digital Skills

#### Programming Languages

R-Language & Rmarkdown | Matlab & Simulink | Python

#### Business & Statistics

Microsoft Excel | Microsoft Access | Microsoft Word | Microsoft PowerPoint | SPSS

#### Database Interaction & Data Ambient

Hive & Impala | Cloudera | Bitwise & Putty | Oracle DB | SQL & PQL | DBeaver

#### Research Support Softwares

JMP & ImageJ | Dewesoft & Labview | LaTeX | Autocad

## ● COMMUNICATION AND INTERPERSONAL SKILLS

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### Strongest Suits

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Communication skills:

- Extremely Advanced, thanks also to my activity as PhD tutor and in the theatre.

Organizational & Management skills:

- Excellent, also thanks to the constant teamwork at the University, organization of theatre shows and experimental work;

Professional skills:

- Problem Solving skills, teamwork skills, accuracy & leadership;

Multicultural skills:

- Excellent, thank also to a personal and working experience in the city of Berlin which was conducted for one year during the interlude between the achievement of the Bachelor's degree and the beginning of the Master's course;
- Willingness to relocate abroad;

## ● PUBLICATIONS

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### **Conference Series: Particle Image Velocimetry analysis of contra-rotating propellers hydrodynamics**

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Capone, A.; Maiocchi, A.; Mohamed, J.; Tripelli, J.; Romano, G. P.; Di Felice, F.; Pereira, F. A  
2020

### **Abstract: The effect of different carrier fluids on heat transfer in a microfluidic device**

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Mohamed, J.; Spizzichino M.; Romano, G.P.;  
2021

## ● CONFERENCES AND SEMINARS

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23/05/2021 – 25/05/2021 – Imperial College London, UK  
**7th Micro and Nano Flows Conference**

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Participation as a relator of the abstract “The effect of different carrier fluids on heat transfer in a microfluidic device”

27/01/2020 – 05/02/2020 – University of Rome, La Sapienza  
**Scientific Writing Seminar**

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Seminar conducted by Prof. Emilio Matricciani

27/11/2017 – 27/11/2017 – Hotel Sheraton, Roma  
**World Engineering Forum 2017 Conference**

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Participation as a Speaker

01/05/2014 – 11/05/2014 – Roma  
**Design of Micro-Wind Plants**

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conducted by Engineer Mario Rosato and organized by AGHAPE

## ● HOBBIES AND INTERESTS

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### **Hobbies**

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- Basketball & Cycling;

- Traveling & Language Tandems;
- Theatrical activity focused on Acting work and in-depth study of lighting engineering in the theatre;
- Medieval Painting & Music;
- Multi cultural Food Experiences, speacialy from Southeast Asia;
- Natural Excursions;
- North European Cinema Culture;

## Areas of Interest

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- Optical Velocimetry Measurement Techniques;
- Infrared Thermal Measurement Techniques;
- Small-scales Heat Transfer Theory;
- Statistical Modeling;
- Machine Learning;
- Coogeneration & Trigeneration;

## ● DRIVING LICENCE

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Driving Licence: B

## ● DATI PERSONALI

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### Trattamento Dati

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Autorizzo il trattamento dei miei dati personali in conformità del medesimo a quanto prescritto dall'art. 4 del Codice in materia di protezione dei dati personali e dall'art. 26 del D. Lgs. 14 marzo 2013, n. 33, inclusa destinazione "ai fini della pubblicazione.