L'Industria incontra Giovani Ingegneri:

Sfide ed Opportunità per Giovani Ingegneri e Aziende



Join **MIPET** Gli interessati ai Colloqui sono invitati a Inviare il proprio Curriculum

INVITO A TUTTI GLI STUDENTI DI

1year1day@simulationteam.com

INGEGNERIA

www.itim.unige.it/mipet

**Meeting Program** 

4 dicembre, 2018 9:45 am - 15:45 pm

Aula Magna, B1, via Opera Pia 15a, 16145 Genov

**Industries** meet Young **Engineers** 

1 Anno di

Colloqui

in 1 solo

Giorno

www.itimainige.it/mipet

pet/job

9:45 Benvenuto Prof. Agostino G. Bruzzone

10:00 Eccellenza e Competitività Gogi

10:30 Responsabili di Aziende Lander a liabilo Mondia

Stide e le Choeriunita per Aziende è Giovan

to Computer Science

incontro direito con le Aziende e Colloqui Pre 12:00 12@0

Meeting with Companies & Campus Interviews 13:00

17:45 Chiusura





















Accesso gratuito e libero, per ulteriori informazioni, prego contattare 1year1day@simulationteam.com www.itim.unige.it/cs/plants/1v1d/dec2018/index.html **Industrial Plant Business Sector meets with Young Engineers:** 

Challenges and Opportunities for Young Engineers & Companies



THE ORIGINAL Join **MIPET ENGINEERING** People interested in Campus Interviews are invited to Send CV to STUDENTS 1year1day@simulationteam.com **ARE INVITED** 

**Meeting Program** 

www.itim.unige.it/mipet

December 4, 2018 9:45 am - 5:45 pm

Aula Magna, B1, via Opera Pia 15a, 16145 Genova

9:45 Welcome Prof. Agestino G. Bruzzones

10:0₽

International Opportunities Taday

Managers from International Wajor Companies
Student/Company Opportunities & Challeng
Meeting with Companies & Cambre Prierview 10:30

12:00

12:3

Meeting with Companies & Campus Interviews 13:00

17:45 Closure





















Free Access, No Registration Fee, for further information please contact 1year1day@simulationteam.com www.itim.unige.it/cs/plants/1y1d/dec2018/index.html

**Industries** 

meet Young

**Engineers** 

1 Year of

Interviews

in 1 Single

pet/job

L'Industria incontra Giovani Ingegneri:

Sfide ed Opportunità per Giovani Ingegneri e Azien





www.itim.unige.it/mipet

**Meeting Program** 

4 dicembre, 2018 – 9:45 am - 17:45 pm

Aula Magna, B1, via Opera Pia 15a, 16145 Genova, Italy

Benvenuto Prof. Agostino G. Bruzzone 9:45

10:00 Eccellenza e Competitività Oggi

10:30 Responsabili di Aziende Leader a livello Mondiale

Sfide e le Opportunità per Aziende e Giovani

Invitation extended

to Computer Science

12:00 Incontro diretto con le Aziende e Colloqui Prelin

12:30 **Break** 

13:00 **Meeting with Companies & Campus Interviews** 

17:45 Chiusura

















Accesso gratuito e libero, per ulteriori informazioni, prego contattare 1year1day@simulationteam.com www.itim.unige.it/cs/plants/1y1d/dec2018/index.html

www.itim.unige.it/mipet/1year1day

1 Anno di

Colloqui

in 1 solo

Giorno

Industrial Plant Business Sector meets with Young Engineers:

Challenges and Opportunities for Young Engineers & Companies





















# Industry & Business meets Young Talents: Challenges and Opportunities for Compand Young Engineers





# Welcome

















Free Access, No Registration Fee, for further information please contact 1year1day@simulationteam.com www.itim.unige.it/cs/plants/1y1d/dec2018/index.html

# Genoa University, Polytechnic School & Engineering Faculty

The University of Genoa is one of the oldest in Italy and in the World (founded in 1471 AD), it is located in middle of Italian Riviera.

The students are about 40,000 (about 8,000 new entries),

and the Engineering Departments involve around 7,500 students distributed among Genoa Locations and two External Sites: Savona Campus and La Spezia Area

Recently the Polytechnic School was established combining Engineering Faculty and Architecture in order to reinforce the vocation of Genoa University to be an International Leader in

Innovative Technologies in a wide spectrum of applications

For further Information about the Engineering & University of Genoa:





# Ordine degli Ingegneri della Provincia di Genova







#### CONFINDUSTRIA Genova



CONFINDUSTRIA
Genova
supports
International
Master MIPET
since its begin
and promotes
these initiatives
among Industrial
Community

Crocco, Confindustria



# Intellectual Capital for Future of Engineering

Jack Welch (GE CEO 1981-2001 from \$14 billions market value to over \$410 billions): Globalization has changed us into a company that searches the world, not just to sell or to source, but to find Intellectual Capital: the World's Best Talents and Greatest Ideas

















Scientists investigate that which already is; Engineers create that which has never been Albert Einstein, Physics Nobel Price 1921

#### Changes around the World

- How it is Changing the Industry & World?
- How Simulation enables to face Risks & Dangers?
- Way Ahead, Challenges and Opportunities



Game

Reality

#### Changes around the World



- How it is Changing the Industry & World?
- How Simulation enables to face Risks & Dangers?
- Way Ahead, Challenges and Opportunities
- An Harsly Evolving World with Big Differences



2018!

Vs.



**Opportunities** 

#### **Some Open Questions?**



- How it is Changing the Industry & World?
- How Simulation enables to face Risks & Dangers?
- Way Ahead, Challenges and Opportunities
- An Harsly Evolving World with Big Differences

```
World GDP (μ ~ 3%)

USA 19.3 TUSD +3.0% ↑

Europe 17.3 TUSD +1.9% ↓

China 12.2 TUSD +6.5% ↓

India 2.6 TUSD +7.1% ↓

Italy 1.9 TUSD +0.7% ↓

Mexico 1.1 TUSD +2.5% ↓
```

2018! →

Vs.

**GDP Dynamics** 

Lybia 0.05τusp +55% ↑ ±110% / -62.1 in 10 years

MyanMar 0.07 Tusp +5.9%

+8.4% / +5.9 in 10 years

Russia 1.3Tusp +0.9%

+11% / -12 in 10 years

#### **Opportunities**

Tianijin Explosion, August 2015, 800 tons Ammonium Nitrate, 173 casualties, 2km range, 9bUSD Ins.Damage

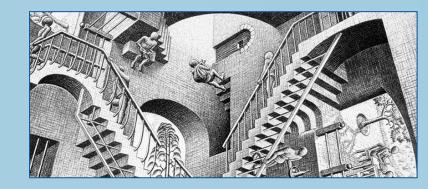
**Threats** 

#### Crisis...

### Ops... sorry it was Capsized!



#### Today: Living in a Paradox



In 2018:

**Uber, the world's Largest Taxi Company,...** 



Facebook, the most popular media owner,...



Alibaba, the most valuable retailer,...



Airbnb, the largest accomodation provider,...



#### owns no Vehicles



creates no content





has no inventory





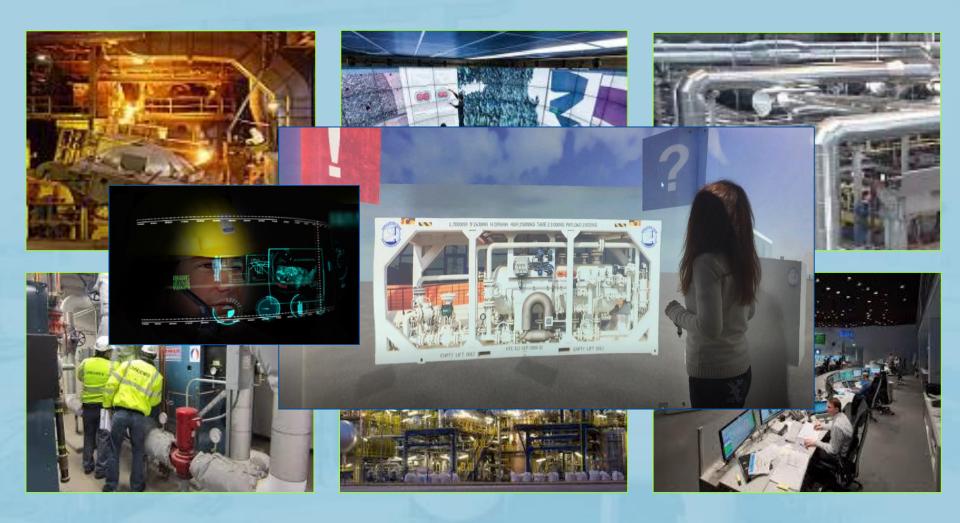
owns no real estate





#### **Looking Really for You?**

#### Yes!



... but you should be... smart... flexible... well prepared... motivated... hard worker... professional... reliable... etc.

## Human Capital is becoming Even more Important

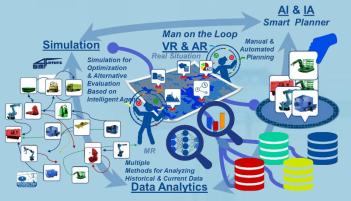
Engineering is providing an unique opportunity to improve the Capabilities and Understanding of high qualified people: Scientists, Researchers, Technicians and Engineers





### **Enabling Technologies**





# STRATEGIC ENGINEERING

Strategic Engineering is a pretty new approach, emerging in Excellence Centers around the World, where New



Technologies and Methods face Challenges & Uncertainty in Complex Systems

Strategic Engineering is the process of designing and analyzing New Solutions in order to achieve Strategic Results against *risks*, *uncertainty*, *competitors*, *threats and* within *critical environments* 

Strategic Engineering is crucial to develop Modern Solutions for Defense, Homeland Security, Government as well as for Industries, Companies, International Agencies & Public Authorities

## **STRATEGOS**

#### **Master Science in Engineering**

A new Educational Degree in

**Engineering Technologies for Strategy in Defense,** 

**Industry, Government & Homeland Security in Companies** 





- **STRATEGOS** is the new International MSc (Master Science) in Strategic Engineering (Laurea Magistrale in Italia, 2 anni)
- STRATEGOS promotes Quantitative Modeling to Support Decisions by developing a new generation of Engineers able to deal with Strategic Thinking & Decision Makers
- STRATEGOS prepares Engineers for Decision Making providing strong foundation in Modeling, Simulation, Scenario Analysis as well as in Enabling Technologies







# Impiantistica e Ingegneria a Genova



In Genoa University several groups are active in Industrial Plant Engineering; for instance the Simulation Team MITIM DIME resulted as evolution of the Institute of **Technology and Industrial Plant Engineering** & Management (ITIM) that was focused on these issues since '60; DIST, DICHEP, **DINAEL** and other Engineering Departments are also active on these subjects. The Genoa University is involved in several R&D activities on Plant and Process Engineering and also in Undergraduate, Postgraduate and Continuous Education on this area. Simulation Team MITIM DIME for instance co-operates actively with major Excellence Centers World-Wide.









### Simulation Team DIME



PETROBRAS

The Simulation Team - MITIM DIME of Genoa University carries out many industrial projects in cooperation with the large corporations and Small and Medium sized Enterprises; some example of recent industrial simulation project are following: BR



ENI Group Fleet Management Planning & Scheduling **Chemical Plant Logistics Optimization** 



Ansaldo

**Plant Service Management** and Optimization



LAMCE **Petrobras** 





**EDA** 

**Decision Support for** 





Cetena

**Simulation for Life Cycle Assessment** 









President Simulation Team (20 Centers Worldwide
 Associate Vice President of SCS and Chairman of Technical Chapter





**AEgis** 

versalis











#### **Examples of Projects**

Industrial Indoor and Outdoor
Use of Robotic Systems for Inspection and Safety

Chemical and Nuclear Plants. Iron & Steel Facilities with UAV and UGV collaborating



Critical Industrial Infrastructure Control and Monitoring
With cooperationg UAV, UGV, UAS and UAV



**IDRASS** 





UAV Unmanned Aerial Vehicle
UGV Unmanned Ground Vehicle
UAS Unmanned Surface Vehicle
AUV Autonomous Underwater Vehicle



**SO2UCI** 

Modeling and Simulation (M&S) allows to investigate innovative solutions in Industrial Plants

## Modeling, Simulation, AR & VR... in Industrial Plants







## MIPET



#### 10<sup>th</sup> Edition 2019









Ordine Ingegneri Genova















Mastering Industrial Plant Engineering and Technologies is an initiative promoted by a joint Team of Academic Institutions, Industries and Associations, MIPET includes an International Master focused on these Issues. The MIPET Excellence is based on the strong cooperation among Academic and Technical Experts coming from Prestigious Universities and Leading Companies operating in this area with special attention to Energy, Iron & Steel, EPC, Large **Industrial Plants and Process Industries, Oil & Gas** 







































































#### **Academia, Institutions** & Industries

#### MIPET ORGANIZERS & SUPPORTING INSTITUTIONS

















































#### PARTNER UNIVERSITIES & INSTITUTIONS













































#### WHAT IS MIPET



MIPET is the <u>International Master in Industrial Plant</u> <u>Engineering of Genoa University</u> (il Master Internazionale in Impiantistica e Tecnologie, Scuola Politecnica, Ingegneria, Università di Genova).

MIPET is the 1st and most consolidated International Master Program of Genoa University, fully sponsored privately by

Major Multinational Companies, investing on young Engineers and looking for talents. 10 Successful Editions in 10 years confirm the strong Industrial Interest in MIPET











#### **4 MONTHS TO WORK**



MIPET 10th Edition starts end of April 2019\* and puts you at Work in only 4 months. After Labs

& Lectures, you will conduct your <u>Internship in a Leading Industry</u> for 3 additional months, just to present your <u>Project Work</u> and being ready to evaluate final Job Proposals by Companies. MIPET Industries participate in Selection Process, they invest time & money in <u>MIPET</u>, so it's not surprising that our <u>Placement Rate overpasses largely 80%</u>.

MIPET guarantees possibility to participate to Engineers graduating in April, Academic Year last session First Week is focused on English Lectures and there is a Summer Break in August







## LEADING ENGINEERING ... AND MORE!

MIPET Program is developed by Industrial Top Experts & Academic Scientists sharing 50% teaching on Practice & Theory of Technical Advances of Industrial Plants and Technologies. In addition, Soft Skills Courses (e.g. Project Management, People Management, HR Orientation\*, Spanish for Latin American Markets) and Seminars, by Managers, Engineers and Scientists of 5 Continents, prepare you to Work all around the Globe.











#### **MIPET: LEARNING BY WORKING WITH EXPERTS**

You will work in International Teams, talking English all the time, while Technical English our Lectures will further improve you on it. The 4 Months of Full Immersion Labs Activities, Computer Simulations, RPGs\*, Plant Visits,



Exercises & Lectures, will make you ready to start a Real Project Work in a Major Company in the Fall, usually paid by Hosting Company.











## GOOD OPPORTUNITIES • FOR JOB & YOUR CAREER

MIPET Outstanding Candidates get free registration, while large majority (usually 90%) receives **Grants** and have to pay only 1'500 Euro; by the way, MIPET Sponsors are expected to refund even this amount to students that they hire at the end.

The MIPET Internships are usually paid by Industries.

This year, the Companies are offering **Great Job Opportunities** to **Italian Engineers** attending MIPET and willing to work, based in their Genoa Offices or in Italy.









# Companies interested in Human Capital & Complex System Engineering







Matteo Bigollo, HR Academy, DANIELI

#### Full-line technology provider

 Unparalleled **EXPERTISE** in the design and supply of the full range of technological solutions for the primary stage of integrated steelmaking.

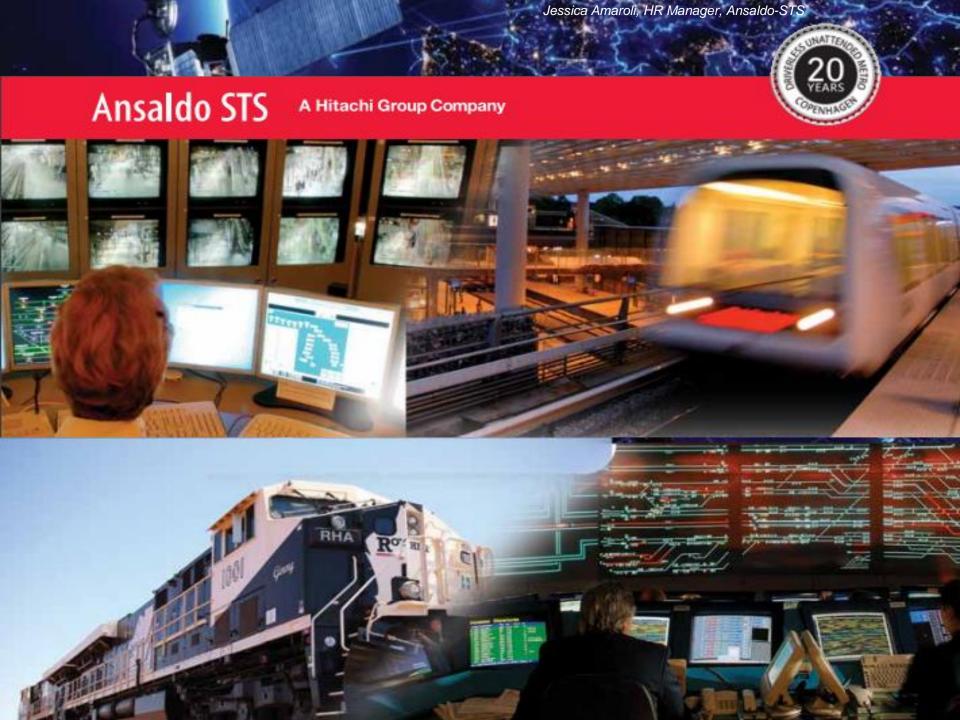


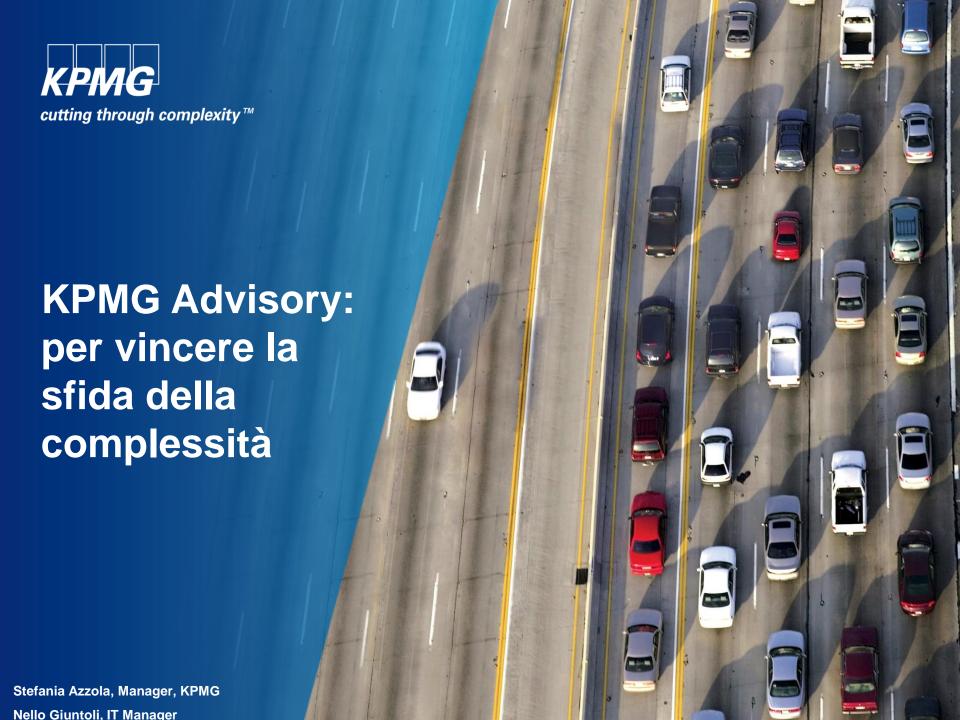


#### PAUL WURTH SMS Group

Paul Wurth









Since more than 60 years, the best tradition of works in the field of glass industry

#### A World Wide Excellence with Headquarters for Engineering & R&D in Genoa







Performance you can rely on.













# Le nostre soluzioni

### Soluzioni GIS - Dati satellitari - USV





### **Management of Advanced Solutions and Technologies**



















**Proud Member of Simulation Team** 

Leader in Modeling & Simulation: The First Italian Company Active as Contractor for M&S with European Defense Agency



VR, AR, M&S, Al/IA, Big Data for Industries & Business Processes



#### www.sim4future.com



#### Organization Chart

Gruppo FOS controlla al 100% diverse aziende con capacità tecnologiche verticali che operano in modo integrato e che si caratterizzano per la presenza in primari Centri di Ricerca internazionali ed importanti distretti tecnologici.





Holding Operativa

Soluzioni IOT



Ingegneria Outsourcing

Servizi Continuativi e Consulenza ICT





Trasferimento Tecnologico





# SESMAT



Assistenza Tecnica e







# SIEMENS



#### **Business Unit Enterprise**

Software Selection
Supporto alla Digital Transformation
Consulenza Specialistica su sistemi ERP
Sviluppo Software
Formazione Finanziata
Application Maintenance

#### **Business Unit PMI**

Formazione IT
Servizio "Cio as a Service"
Sviluppo applicazioni ad hoc
Servizio di "Digital Coaching"
Software Selection
Sviluppo progetti IT

#### **Business Unit Channel & Alliances**

Recruitment di partner Sviluppo Partner Plan Attività di Lead Generation Business Development Sviluppo di Sales Plan e metodologie di vendita Formazione partner



SUPPORTIAMO LE AZIENDE A FARE LEVA SULLE TECNOLOGIE PER COMPETERE







#### Le nostre aree d'azione







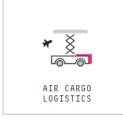
















#### **BCUBE** in numeri

600,0 MLN
FATTURATO

2,0 MLN
ITEMS GESTITI

2,1 MLN
M3 IMBALLATI

4,6 MLN
TONNELLATE SPEDITE

21.000
ORE DI FORMAZIONE

114,4 MLN



Si chiama Spindox Labs il nostro polo per l'innovazione spinta, a due passi dall'Università di Trento. È la struttura in cui facciamo scouting tecnologico, prototipizzazione (anche insieme a **Blackdee**), progetti di ricerca finanziati, partnership con start-up e spin-off universitari, supporto all'implementazione di soluzioni innovative presso i clienti.

C'è poi un filo rosso, che unisce la sede di Trento con gli uffici di **Spindox North America**. A Chicago ci siamo insediati presso l'incubatore 1871, uno dei più grandi degli Stati Uniti. Anche da lì sviluppiamo il rapporto con le start-up d'Oltreoceano e studiamo nuove soluzioni per i nostri clienti.

#### Aree di sviluppo:

- Intelligenza artificiale (algoritmi di deep learning per il riconoscimento del linguaggio naturale e la visione artificiale)
- · Modellizzazione 3D
- · Sensoristica per la localizzazione indoor e outdoor
- · Sensoristica indossabile
- Blockchain
- Robot e droni collaborativi



# © Enginium Chi siamo

Siamo una società di servizi di engineering, parte integrante di Gi Group, la prima multinazionale italiana del lavoro.

Forniamo servizi di consulenza, progettazione e outsourcing alle aziende dei settori Automotive, Aerospazio e Difesa, Transportation, Telecomunicazioni, Energy e Oil &Gas.

ENGINIUM È LA SOCIETÀ SPECIALIZZATA ENGINEERING DI GI GROUP, LA PRIMA MULTINAZIONALE ITALIANA DEL LAVORO.

www.gigroup.it





















the Brainware company



AeroSpace (18%)



Defence (11%)



AirTrafficControl (8%)



Automotive & SmartSystems (13%)



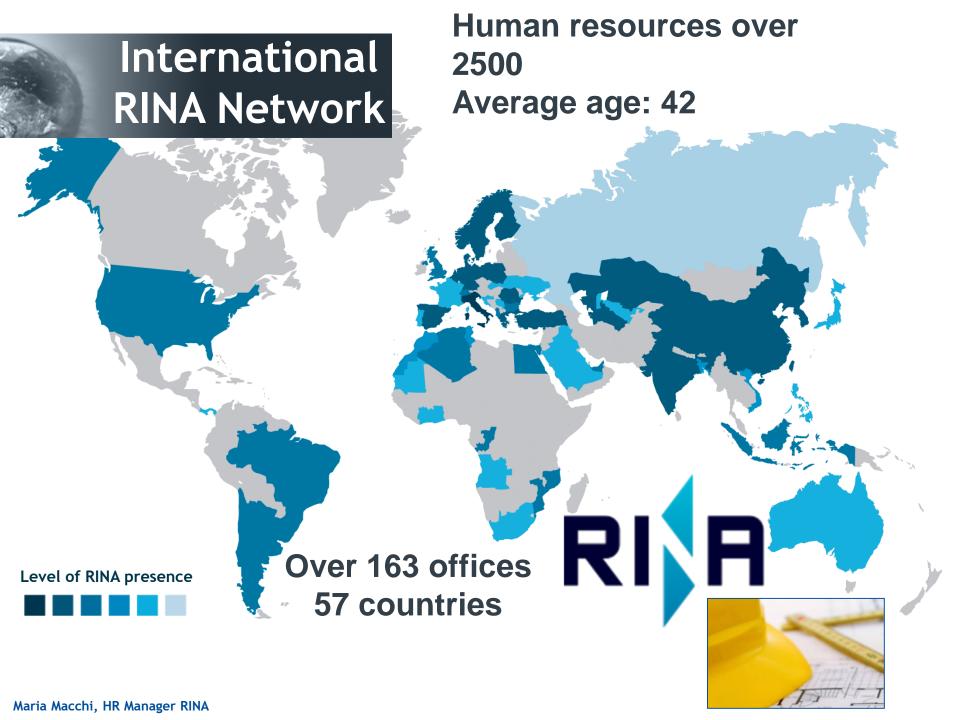
Railway (31%)



Telecom.
(15%)



Processes & Safety (4%)









Maria Nastasi, Web Services Eures, Cristina Gagino, Eures



End2End Service Driven
Supply Chain Planning
Automation



# Questions & Free Discussion...





















**SIEMENS** 

Infineum

























## References

www.itim.unige.it/mipet mipet@itim.unige.it

Prof. Agostino G. Bruzzone DIME, University of Genoa via Opera Pia 15, 16145 Genova Email agostino@itim.unige.it URL www.itim.unige.it



















**Dott.ssa Marina Massei DIME, University of Genoa** 

Via Cadorna, 17100 Savona, Italy Email massei@itim.unige.it URL www.itim.unige.it/mipet







Ing.Matteo Agresta Simulation Team, DIME

Via Opera Pia 15, 16145 Genova, Italy Tel +39 346 8289 012 - Fax +39 019 2302 289. Email matteo.agresta@simulationteam.com URL www.itim.unige.it/mipet



















