

Agostino G. BRUZZONE

Sex M |

Nationality Italian

Enterprise

University

EPR

D Management Level

@ Full professor

I:] Research Director and 1st level Technologist/

|:] Mid-Management Level

|:] Associate Professor

First Researcher and 2nd level Technologist

|:] Employee/ worker level

EI Researcher and Technologist of IV, V, VI and VII level /Technical collaborator

I:] Level |||Researcher and Technologist

[Researcher and Technologist of IV, V, VI and VII level /Technical collaborator

WORK EXPERIENCE

2002—PRESENT Full Professor

University of Genova

- Modeling&Simulation, Industrial Plants, Project management, Logistics for Mechanical, Management, Energetic and Industrial Engineering
- Chair of Strategic Engineering (LM/Master)
- Professor for PhD in Strategic Engineering
- Professor for PhD in Mathematics and Simulation Engineering
- Member of CIELI - Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture
- Member of SIMAV - Centro di servizio di Ateneo di simulazione e formazione avanzata (2020)
- Director of MIPET - International Master in Industrial Plant Engineering

2012 — 2014 NATO Science and Technology Organization

Centre for Maritime Research and Experimentation, La Spezia, Italy

Modeling and Simulation Project Leader

Developing a New Research Track in Marine Simulation for NATO STO

2012 — present

Simulation Team

International Non Profit Scientific Society with over 20 Entities including Labs, University Departments and Start Up Companies

President

Representing and Directing Simulation Team as International Leading M&S (Modeling and Simulation Society)

2010 — present .M&S Net

Excellence Network with 34 Institutional Centers in America, Asia, Europe

General Director

- . Directing M&S CenterActivities
- Coordinate M&S Net Centers
- . Promoting M&S development in the simulation Community
- . Representing M&S Net Centers

2012 — present IIPET

International Master in Industrial Plant Engineering and Technologies

President

2004 — present .

- Directing this International Master Program of Genoa University sponsored by Companies; this Master addresses Project Management, Industrial Plant Engineering, Constructions, Regulations, Safety, etc.

DIME Genoa University
Department of Industrial, Mechanical and Energetic Engineering
Full Professor

- Research on Industrial Plants, Modeling and Simulation, Industrial processes, Project Management, etc.
- Teaching Project Management, Logistics, Modeling and Simulation, HLA, etc.
- Coordinating PhD, Master Thesis

1996 — present McLeod Institute of Simulation Science, Genoa Center

Director

- Coordinating Genoa Center activities in M&S within DIPTTEM Genoa University

The International Society for Modeling and Simulation International (SCS)
Member of the Board of Directors

- Serving in the Board to Direct SCS activities

1996 — present LiOph8ht Simulation

International Non Profit Organization

President

- Organizing Major Simulation Conference and Meeting Worldwide
- International Diffusion and Exploitation of M&S

2007 — 2010 M&S Net

Excellence Network with 34 Institutional Centers in America, Asia, Europe

General Vice Director

- Cooperating in M&S Center Supervision
- Support the Coordination M&S Net Centers
- Developing M&S NetWeb Services
- Supporting M&S Net Centers Promotion

2003 — 2007 McLeod Institute of Simulation Science

24 Centers operating world wide on Modeling and Simulation

General Director

- Directing McLeod Activities
- Coordinating McLeod Institute Activities world wide
- Promoting McLeod development in the simulation Community
- Representing McLeod Institute

1992 — 1995 FreeLance Consultant

- Consulting to Industries (i.e. Steel, Glass, Food & Beverages), to Services Environment, Power, Construction & Engineering, Airlines & Tour Operators) and into Maritime Sector (i.e. Port Services, Intermodal & Transport Services, Logistics, Pofl Terminals)

1992—1993 G0n0v31 Innovazione Industriale

Consultant

- External Consultant for New Business Developments

1991—1991 ITIS Ferraris

Teacher

- Teacher for Technical HighSchool

1990— 1990

IPSIA Finale Ligure

Teacher

Teacher for Technical HighSchool

EDUCATION AND TRAINING

997 - 1997

Visiting Professor in Boston College

Research and Education in BC, Boston MA

1 985-1 992

Mechanical Engineering in Genoa University, Sumrr

1 984-1 985

Accademia Navale (3rol in Scientific Ranking, 5th i

1 984

Maturita' Classica, Liceo G.Chiabrera SV, 60/60

PERSONAL SKILLS

Mothertongue(s) Italian

Other language(s)

Language	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	C1	C1	C1	C1	C1	C1
French	C1	C1	VERY FLUENT	B2	B2	B2
Spanish	A2	A2	Fluent A1 BASIC	A1	A0	A0
Portugum	A2	A1	A1	A1	A0	A0
German	A1	A1	VERY BASIC	A1	A0	A0

LEVELS: A1/2: BASIC USER- B1/2: INDEPENDENT USER— C1/2 PROFICIENT USER
COMMON EUROPEAN FRAMEWORK OF REFERENCE FOR LANGUAGES

Job-related skills Mentoring Talented People, Expert in R&D, Decision Maker, Problem Solver, Project Manager.

Technology Transfer skills Replace with pregresse esperienze e competenze tecnico scientifiche e di trasferimento tecnologico (brevetti, sw registrati, poli, spin off, ...) Partner of SJM4Future, UniGE Spinoff

Higher Education & Training skills Replace with esperienze di gestione/partecipazione in progetti di formazione superiore (summer school, dottorato, master, executive...) Sponsor and advisor of over 15 PhD Thesis in Mathematical Engineering and Interoperable

Simulation (DIMS PhD Program) in Genoa University.
 Advisor and Reviewer for Thesis in France, Ireland, USA, Germany, Kuwait and Saudi Arabia.
 NATO M&S COE: M&S Course
 Master PREMITELE for Ministero Infrastrutture, Albo Autotrasporto, Logistics Professionals
 Italian Navy (Accademia Marina Militare) M&S Course
 IEPAL: EU-US programme for International Students' exchange
 EULEP: EC COVE programme for VET (Erasmus+)
 AIDI Summer School 'Francesco Turco'
 M&S, HLA course for Defense and Industry
 PhD in Strategic Engineering
 SEE: Simulation Exploration Experience. Lead by NASA

Project Management skills Replace with esperienza nella gestione e realizzazione di progetti complessi/di eccellenza, anche in collaborazione con il sistema della ricerca, il sistema produttivo e le istituzioni territoriali
 Long Experience in Project Management on International Multi Company Projects involving R&D and Consulting
 - Directing Units with 10-20 people
 - President and/or General Director in Organization with over 100 people
 - Project Manager in multiple projects concurrently
 - Experience as PM Coordinator in ICT (over 100 concurrent Projects in large companies, —1 billion USD)
 Experience as PM in projects around 1-6 MUSD

Other skills Yacht Regattas (over 50 Cups won at International and National Level)

ADDITIONAL INFORMATION

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Projects Replace with partecipazione a progetti di ricerca nazionali e internazionali
 EDA- European Defence Agency:
 ° PIOVRA Poly-functional Intelligent Operational Virtual Reality Agents...
 ° CAPRICORN - CIMIC And Planning Research In Complex Operational Realistic Network.
 Italian MOD PNRM:
 ° CGF C4 (IT) Integrated Intelligent CGF supporting C4 in Network Centric Warfare (NGW).
 ° SIMCJOH Simulation of Multilateral Joint Operations involving Human Factors).
 MIUR PRIN:
 DIEM-SSP, Gestione dei Disastri e delle Emergenze per il miglioramento della Sicurezza negli Impianti Industriali
 INAIL Bando Bric
 SISOM: Simulation Solutions based on virtual & augmented reality for Maintenance
 W-Artemys: Wearable augmented reality for employee safety in manufacturing systems
 I4D3A2: Wearable augmented reality for employee safety in manufacturing systems
 FSE EQUAL
 INNOVARE (Sviluppo Intermodale Novara e Vercelli Abilita' Risorse Umane)
 SITRANET: Simulazione for Training & Education in Transportations
 UE Fondo Europeo di Sviluppo Regionale, Programma Italia-Francia Marittimo 1420
 ALACRESZ: Servizio Avanzato di Laboratorio per Crisi ed Emergenze in porto nello spazio di cooperazione dell'alto tirreno, basato su Simulazione

Publications Replace with relevant publications

1. Bruzzone, A. G., Massei, M., Sinelshchikov, K., Fadda, P., Fancello, G., Fabbri, G., & Gotelli, M. (2019). Extended reality, intelligent agents and simulation to improve efficiency, safety and security in harbors and port plants. Paper presented at the International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation, 88-91.
- Bruzzone, A., Longo, F., Chiurco, A., Crupi, F., Lanuzza, M., Emanuele, A. L., Molinaro, J. (2015). A tool to support harbor terminals design. Paper presented at the International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation, 103-108.
- Bruzzone, A., Longo, F., & Tremori, A. (2013). An interoperable simulation framework for protecting port as critical infrastructures. *International Journal of System of Systems Engineering*, 4(3-4), 243-260. doi:10.1504/U88E2013057661
- Bruzzone, A., Longo, F. (2013). 3D simulation as training tool in container terminals: The TRAINPORTS simulator. *JOURNAL OF MANUFACTURING SYSTEMS*, vol. 32, p. 85-98, ISSN: 0278-6125, doi: 10.1016/j.jm3y201207016
- Bruzzone, A., Longo, F., Nicoletti, L., & Diaz, R. (2012). Traffic controllers and ships pilots training in marine ports environments. Paper presented at the Emerging M and S Applications in Industry and Academia Symposium 2012, EAlA 2012 - 2012 Spring Simulation Multiconference, 61-68.
- Bruzzone, A., Nicoletti, L., Chiurco, A., Diaz, R., & Palaia, E. (2012). Marine ports environmental sustainability: A state of the art overview. Paper presented at the 14th International Conference on Harbor, Maritime and Multimodal Logistics Modeling and Simulation, HMS 2012, Held at the International Multidisciplinary Modeling and Simulation Multiconference, ISM 2012, 188-196
- Bruzzone, A., Tremori, A., & Longo, F. (2012). Interoperable simulation for protecting port as critical infrastructures. Paper presented at the 14th International Conference on Harbor, Maritime and Multimodal Logistics Modeling and Simulation, HMS 2012, Held at the International Multidisciplinary Modeling and Simulation Multiconference, ISM 2012, 175-180.
- Bruzzone, A., Longo, F., Nicoletti, L., & Diaz, R. (2011). Virtual simulation for training in ports environments. Paper presented at the Proceedings of the 2011 Summer Computer Simulation Conference, 235-242.
- Bruzzone, A. G., Fadda, P., Fancello, G., Massei, M., Bocca, E., Tremori, A., Tardone, G. (2011). Logistics node simulator as an enabler for supply chain development: innovative portainer simulator as the assessment tool for human factors in port crane simulation. *INTERNATIONAL JOURNAL OF SIMULATION & PROCESS MODELLING*, vol. 87, p. 857-874, ISSN: 0037-5497, doi: 10.1177/0037549711418688
10. BRUZZONE, Fadda P., Fancello G., Bocca E., D'Errico G., Massei M. (2010). Virtual world and biometrics as strongholds for the development of innovative port interoperable simulators for supporting both training and R&D... *INTERNATIONAL JOURNAL OF SIMULATION & PROCESS MODELLING*, vol. 6, p. 89-102, ISSN: 1740-2123, doi: 10.1504/IJSPM2010032661
11. Bruzzone, A., Cimino, A., Longo, F., & Mirabelli, G. (2010). TRAINPORTS-TRAINING in marine port by using simulation. *International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation*, 1, 25-32
12. Bruzzone, A. G., Tremori, A., & Bocca, E. (2010). Security & safety training and assessment in ports based on interoperable simulation. *International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation*, 1, 7-14.
13. Bruzzone, A. G., Fadda, P., Fancello, G., D'Errico, G., Bocca, E., & Massei, M. (2009). Avibration effect as fatigue source in a port crane simulator for training and research: Spectra validation process. *International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation*, 1, 77-86.
14. Bruzzone, A., & Longo, F. (2008). VIP - virtual interactive port. Paper presented at the Summer Computer Simulation Conference 2008, 8080 2008, Part of the 2008 Summer Simulation Multiconference, SummerSim 2008, 552-560.
15. Bruzzone, A. G., Poggi, S., & Bocca, E. (2008). Framework for interoperable operations in port facilities. Paper presented at the Proceedings - 22nd European Conference on Modelling and Simulation, ECMS 2008, 277-282. doi:10.7148/2008-0277
16. SIGNORILE R., A. BRUZZONE (2004). Harbour Management using Simulation and Genetic Algorithms. *PORT TECHNOLOGY INTERNATIONAL*, vol. 19, p. 163-164, ISSN: 1358-1759
17. BRUZZONE, SIGNORILE R. (2001). Container Terminal Planning by Using Simulation and Genetic Algorithms. *SINGAPORE MARITIME & PORT JOURNAL*, p. 104-115, ISSN: 0219-1555
18. Bruzzone Agostino (1999) "Port Terminal Simulators as Main Supports for Design, Training & Management", Proc. of Port Logistics, Alexandria, Egypt, Feb 14-16
19. Bruzzone A.G., Giribone P., Rapallo S. (1999) "Simulation for Environmental Impact Analysis in Port Areas", Proceedings of HMS99, Genoa, September 16-18
20. Bruzzone A.G., Giribone P., Carbone A. (1999) "Terminal Simulation as Support for Port Logistics", Proceedings of HM899, Genoa, September 16-18
21. Bruzzone, A. G. (1998). Harbour and maritime simulation. *Simulation*, 71(2), 72-73
22. Giribone P., A.G. Bruzzone (1994) "Analysis through Simulation of Unstable Variables based on Chaos Theory: Warehouse Management in a Port Terminal", Proceedings MICQ4, Grindelwald, February 21-23

Collaborations Replace With eventuali collaborazioni nazionali e internazionali in essere con altre istituzioni e centri di alta qualità scientifica

- . EU Universities (Barcelona, La Rioja, Riga, Marseille, Brunel, Ecole des Mines)
- . NASA
- . Dalle Molle institute for artificial intelligence, IDSIA USI-SUPSI
- . Universidade Federal do Rio de Janeiro, LAMCE - Laboratório de Métodos Computacionais em Engenharia
- . Water Academy SRD

Date, 25/11/2022

Signature

TRADUZIONE DI CORTESIA

DATI PERSONALI **Agostino G. BRUZZONE**

9

M | nato il Nazionalità Italiana

Aziende

|:| Management Level

|:| Mid-Management Level

|:| Employee/ worker level

Università

IZ Full professor

|:| Associate Professor

EI Researcher and Technologist of IV, V, VI and VII level /Technical collaborator

EPR

I:] Research Director and 1st level Technologist/
First Researcher and 2nd level Technologist

I:] Level |||Researcher and Technologist

[\ Researcher and Technologist of IV, V, VI and VII level /Technical collaborator

Esperienze lavorative

2002—PRESENTE **Professore Ordinario**
Università di Genova

- Corsi: Modeling&Simulation, Industrial Plants, Project management, Logistics for Mechanical, Management, Energetic and Industrial Engineering
- Coordinatore del Corso in Strategic Engineering (LM/Master)
- Docente per PhD in Strategic Engineering
- Docente per PhD in Ingegneria Matematica e Simulazione
- Membro del CIELI - Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture
- Membro del SIMAV - Centro di servizio di Ateneo di simulazione e formazione avanzata (2020)
- Presidente del Master di II Livello MIPET - International Master in Industrial Plant Engineering

2012 — 2014 **NATO Science and Technology Organization**
Centre for Maritime Research and Experimentation, La Spezia, Italy
Modeling and Simulation Project Leader

Sviluppo di una nuova linea di Ricerca in 'Marine Simulation' per il NATO STO

2012 — presente

Simulation Team

Società Scientifica Internazionale No Profit con oltre 20 Enti tra Laboratori, Dipartimenti Universitari e Stad Up Aziende

Rappresentante del ST leader internazionale nel campo del M&S

2010 — presente **M&S Net**

Excellence Network con 34 Centri Istituzionali in America, Asia, Europa
General Director

- ° Dirige le attività del Centro M&S
- ° Coordina i centri M&S Net
- ° Promuove lo sviluppo di M&S nella community di simulazione
- ° Rappresenta i centri M&S Net

2012 — present

International Master in Industrial Plant Engineering and Technologies

- Direzione del Master Internazionale dell'Università di Genova sponsorizzato da Imprese; il Master affronta temi di Project Management, Impiantistica Industriale, Costruzioni, Normative, Sicurezza, ecc.

2004 — presente .

DIME Università di Genova

Dipartimento di ingegneria meccanica, energetica, gestionale e dei trasporti
Professore Ordinario

- Ricerca: Impianti Industriali, Modellazione e Simulazione, Processi Industriali, Project Management, ecc.
- Insegnamenti: Project Management, Logistica, Modellazione e Simulazione, HLA, ecc.
- Relatore di tesi di dottorato di ricerca e tesi di laurea (LM/L)

1996 — presente **McLeod Institute of Simulation Science, Genoa Center**

Direttore

- Coordinamento delle attività del Centro di Genova all'interno del DIPTM Università di Genova

The International Society for Modeling and Simulation International (SCS)

Membro del Board of Directors

- direzione delle attività della SCS

1996 _ p'resente **Liophant Simulation**

Organizzazione internazionale senza scopo di lucro

Presidente

- Organizzazione di conferenze e incontri sui temi della Simulazione in tutto il mondo
- Attività internazionale di diffusione e sfruttamento delle tecniche di M&S

2007 — 2010 **M&S Net**

Excellence Network con 34 Centri Istituzionali in America, Asia, Europa

Vice Direttore Generale

- 0 Cooperazione nella Supervisione del Centro M&S
- Supporto ai Centri di Coordinamento M&S Net
- Sviluppo di servizi Web M&S Net
- Supporto alla promozione dei centri M&S Net

2003 — 2007 **McLeod Institute of Simulation Science**

24 Centri operativi in tutto il mondo su Modellazione e Simulazione

Direttore Generale

- Dirigere le attività di McLeod
- 0 ◦ Coordinamento delle attività del McLeod Institute in tutto il mondo
- 0 ◦ Promuovere lo sviluppo di McLeod nella community di simulazione
- ◦ In rappresentanza dell'Istituto McLeod

1992 - 1995 **Consulente Free-Lance**

- ◦ Consulenza alle industrie (es. acciaio, vetro, alimenti e bevande), ai servizi (es. ambiente, energia, costruzioni e ingegneria, compagnie aeree e tour operator) e nel settore marittimo (es. servizi portuali, servizi intermodali e di trasporto, logistica, terminal portuali)

Genova Innovazione Industriale

1992_ 1993 **Consulente**

- ◦ Consulente esterno per lo sviluppo di nuovi business

ITIS Ferraris

1991-1991 **Insegnante**

- Docente per Istituto Tecnico

1990— 1 990

IPSIA Finale Ligure
Insegnante
Docente per Istituto Tecnico

ISTRUZIONE E FORMAZIONE

997 - 1997 Visiting Professor presso Boston College
Ricerca e Formazione presso BC, Boston MA

1985-1992 Ingegneria Meccanica presso Università di Genova,
Summa cum Laude

1984-1985 Accademia Navale (3rol classifica scientifica,
5° classifica generale)

1984 Maturita' Classica, Liceo G.Chiabrera SV, 60/60

ABILITÀ PERSONALI

Lingua(e) madre(i) Italiano

Altre lingue)

Language	UNDERSTANDING		SPEAKING		WRITING	
	"Steian	Reading	Spoken interaction	Spoken production		
English	C1	C1	C1	C1	C1	C1
French	C1	C1	VERY FLUENT	Bz	Bz	Bz
Sparisr	A2	A2	Fluent	A1	A1	A0
Portug" German	A2	A1	A1	A1	A1	A0
	A1	A1	VERY BASIC	A1	A1	A0

LEVELS: A1/2: BASIC USER- B1/2: INDEPENDENT USER- C1/2 PROICIENT USER
COMMON EUROPEAN FRAMEWORK OF REFERENCE BR LANGUAGES

Competenze professionali Mentore di persone di talento, Esperto in R&D, Decision Maker, Problem Solver, Project Manager

Capacità di trasferimento tecnologico Senior Partner di SJM4Future, Spinoff UniGE

Competenze di istruzione superiore e formazione Sponsor e relatore di oltre 15 Tesi di Dottorato in Ingegneria Matematica e Simulazione Interoperabile (Dottorato DIMS) presso l'Università di Genova.
Advisor e revisore per tesi in Francia, Irlanda, USA, Germania, Kuwait e Arabia Saudita.

NATO M&S COE: Corso di M&S
 Master PREMITELE per Ministero Infrastrutture, Albo Autotrasporto, Professionisti del settore Logistica
 MMI (Accademia Marina Militare) Corso di M&S
 IEPAL: EU-US programma di scambio di studenti internazionali
 EULEP: EC COVE programma VET (Erasmus+)
 AIDI Summer School 'Francesca Turco'
 Corso di M&S, HLAcourse per il settore Difesa e Industria
 PhD in Strategic Engineering
 SEE: Simulation Exploration Experience Coordinato da NASA

Capacità Gestionali Lunga esperienza nella gestione di progetti internazionali multi azienda che coinvolgono R&D e consulenza
 - Dirigere Unità con 10-20 persone
 - Presidente e/o Direttore Generale in Organizzazioni con oltre 100 persone
 - Project Manager in più progetti contemporaneamente
 - Esperienza come coordinatore PM nell'ICT (oltre 100 progetti simultanei in grandi aziende, —1 miliardo di USD)
 Esperienza come PM in progetti intorno a 1-6 MUSD

Altre Capacità Regate (oltre 50 Coppe vinte a livello internazionale e nazionale)

INFORMAZIONI AGGIUNTIVE

Progetti EDA- European Defence Agency:
 ° PIOVRA Poly-functional Intelligent Operational Virtual Reality Agents...
 ° CAPRICORN - CIMICAnd Planning Research In Complex Operational Realistic Network.

Ministero Difesa IT PNRM:

° CGF C4 (IT) Integrated Intelligent CGF supporting C4 in Network Centric Warfare (NGW).
 ° SIMCJOH Simulation of Multilateral Joint Operations involving Human Factors).

MIUR PRIN:

DIEM-SSP, Gestione dei Disastri e delle Emergenze per il miglioramento della Sicurezza negli Impianti Industriali

INAIL Bando Bric

SISOM: Simulation Solutions based on virtual & augmented reality for Maintenance
 W-Artemys: Wearable augmented reality for employee safety in manufacturing systems
 I4D3A2: Wearable augmented reality for employee safety in manufacturing systems

FSE EQUAL

INNOVARE (Sviluppo Intermodale Novara e Vercelli Abilita' Risorse Umane)

SITRANET: Simulazione for Training & Education in Transportations

UE Fondo Europeo di Sviluppo Regionale, Programma Italia-Francia Marittimo 1420

ALACRESZ: Servizio Avanzato di Laboratorio per Crisi ed Emergenze in porto nello spazio di cooperazione dell'alto tirreno, basato su Simulazione

Pubblicazioni

1. Bruzzone, A. G., Massei, M., Sinelshchikov, K., Fadda, P., Fancello, G., Fabbrini, G., & Gotelli, M. (2019). Extended reality, intelligent agents and simulation to improve efficiency, safety and security in harbors and port plants. Paper presented at the International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation, 88-91.
2. Bruzzone, A., Longo, F., Chiurco, A., Crupi, F., Lanuzza, M., Emanuele, A. L., ... Molinaro, J. (2015). A tool to support harbor terminals design. Paper presented at the International Conference on Harbour, Maritime and Multimodal Logistics Modelling and Simulation, 103-108.