

Europass Curriculum Vitae



Updated to 11/ 11/ 2011

Personal information

Surname(s) / First name(s)	Micheli, Davide
Address(es)	7a, Cardinal Bofondi, 00165, Rome, (Italy)
Telephone(s)	
E-mail	davide.micheli@gmail.com
Nationality	Italian
Date of birth	02,04,1967

Desired employment / Occupational field	<ul style="list-style-type: none"> • Scientific research • Interests <ul style="list-style-type: none"> • Telecommunications. • Nanotechnologies. • Astronautics
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Work experience

Dates	from 2010 to 2011
Occupation or position held	Researcher
Main activities and responsibilities	<ul style="list-style-type: none"> • Design of Acoustic Absorber
Name and address of employer	Aeronautical Service S.R.L.

Dates	from 2002 to 2011
Occupation or position held	Researcher
Main activities and responsibilities	<ul style="list-style-type: none"> • Reference documentation on UMTS Radio Access Parameters and Key Performance Indicators • Infomobility by using mobile phone traffic informations • UMTS radio access quality optimization by using Neural Network • Teaching on technical educational field on GSM, UMTS and GPS systems
Name and address of employer	Telecom Italia, Head Quarter located in Rome
Type of business or sector	TILAB Cellular Planning & Project Engineering

Dates	from 1997 -to 2001
Occupation or position held	Cellular phone Service Quality Management
Main activities and responsibilities	<ul style="list-style-type: none"> • Planning of the Radio Base Stations • GSM network quality optimization
Name and address of employer	Telecom Italia Mobile S.p.A. Operational Area located in Ancona (Italy)
Type of business or sector	Telecommunications: Cellular Telephony

Dates	from 1989-to 1996
Occupation or position held	Start-up of TACS Network & Management of the Radio Base Stations maintenance technical group
Main activities and responsibilities	<ul style="list-style-type: none"> • Survey, planning and control of the new Radio Base Stations building process • Economic budget management • Maintenance of Radio Base Stations
Name and address of employer	Telecom Italia Mobile S.p.A. Operational Area located in Ancona

Education and training

Dates	from 2010 -to 2011
Title of qualification awarded	Post Doc. Researcher
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> • Ballistic Characterization of Composite nanostructured materials using electromagnetic accelerators • Radar Absorbing Materials design using composite nanostructured materials and evolutionary computations
Name and type of organization providing education and training	"Sapienza" University of Rome Astronautic Electrical and Energy Engineering Department:

Dates	from 2010 – to 2011
Title of qualification awarded	Master
Principal subjects/occupational skills covered	MASTER ON "COMPOSITES AND NANOTECHNOLOGIES FOR AEROSPACE"
Name and type of organization providing education and training	"Sapienza" University of Rome Astronautic Electrical and Energy Engineering Department:
Level in national or international classification	110/110

Dates	from 2007 – to 2010
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Carbon Nanotubes and Nanotechnologies in the Sector of the Aerospace Engineering, with particular emphasis on Microwave Absorbing Materials
Name and type of organization providing education and training	"Sapienza" University of Rome Astronautic Electrical and Energy Engineering Department:
Level in national or international classification	110/110

Dates	from 2002 – to 2007
Title of qualification awarded	III level Laurea, in Astronautics Engineering
Principal subjects/occupational skills covered	Carbon Nanotubes and Nanotechnologies in the Sector of the Aerospace Engineering, with particular emphasis on Microwave Absorbing Materials
Name and type of organization providing education and training	University of Roma "La Sapienza" Department of Aerospace and Astronautics Engineering
Level in national or international classification	M.S./B.S., 110/110 <i>cum laude</i>

Dates	from 1990– to 2001
Title of qualification awarded	Laurea (equivalent Degree + Master) in Electronics and Telecommunications
Principal subjects/occupational skills covered	Electronic and Telecommunication Engineering, with particular emphasis on Genetic Algorithms applied in design and optimization of Mobile Phone Networks
Name and type of organization providing education and training	University of Ancona Department of Electronics and Telecommunications
Level in national or international classification	M.S./B.S., Electronics and Telecommunications Engineering December 2001. Final grade 101/110.

Dates	from 1981 – to 1986
Title of qualification awarded	Diploma in Electrical Expert
Principal subjects/occupational skills covered	Electrical Applications, with particular emphasis on pressure sensors and acquisition data systems
Name and type of organization providing education and training	Secondary school: Istituto Tecnico Industriale Statale Vito Volterra in Torrette (Ancona)

Dates	from 1990 – to 2011
Title of qualification awarded	It must be understood as continuous updating on the job
Principal subjects/occupational skills covered	<ul style="list-style-type: none"> • FEM electromagnetic simulation using COMSOL • Satellites telecommunication systems • GSM and UMTS Radio Access Network systems • IP networking • PCM coding • HTML programming language • Web design • GPS system • Training Course on “Public Speaking” • Training Course on “Training for the Trainer” i.e. teaching methods • Training Course in order to improve “Coaching” within a working group • Training Course on “Listening and Communications “ within a working group • Training Course on “Working Group Performances Evaluation” • Outdoor Training course on “People Integration” between several working groups • English Upper intermediate training course • Balanced Score Indicators on Business Company Managemet
Name and type of organization providing education and training	<ul style="list-style-type: none"> • COMSOL training center • Reiss Romoli Telecommunications School • Siemens GSM training center • PLLB GSM training center • Nokia UMTS training center • FMR Space GPS training center • Telecom Italia training center

Personal skills and competences

Mother tongue(s)	Italian				
Other language(s)	English profile				
Self-assessment	Understanding		Speaking		Writing
<i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	

<p style="text-align: center;">English</p> <p style="text-align: center;">TOEIC exam</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">B2</td> <td style="width: 12.5%; text-align: center;">Independent user</td> <td style="width: 12.5%; text-align: center;">B2</td> <td style="width: 12.5%; text-align: center;">Independent user</td> <td style="width: 12.5%; text-align: center;">B2</td> <td style="width: 12.5%; text-align: center;">Independent user</td> <td style="width: 12.5%; text-align: center;">B2</td> <td style="width: 12.5%; text-align: center;">Independent user</td> <td style="width: 12.5%; text-align: center;">B2</td> <td style="width: 12.5%; text-align: center;">Independent user</td> </tr> </table> <p>(*) <i>Common European Framework of Reference for Languages</i></p> <ul style="list-style-type: none"> • Score : 690 = Basic Working Proficiency 	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user		
<p style="text-align: center;">Social skills and competences</p>	<ul style="list-style-type: none"> • Relationship skills have been developing in several projects which requires integration with other people who are working on other branches and/or in other Companies. • Teaching activity is useful to optimize communication skills 										
<p style="text-align: center;">Organizational skills and competences</p>	<ul style="list-style-type: none"> • Acquired in human resources management 										
<p style="text-align: center;">Technical and Computer skills and competences</p>	<p>Abilities in layout of technical & scientific documentations, acquired:</p> <ul style="list-style-type: none"> • In professional activity: technical, management & teaching type • At the university in publications & documentations preparation <p>knowledge of the following software</p> <ul style="list-style-type: none"> • COMSOL • Macromedia Web Design • Windows Office Family • Autocad • Matlab • GPS software • GIS software <p>Mechanical ability on metals workmanship through</p> <ul style="list-style-type: none"> • Rectification, Cutter and Lath machine 										
<p style="text-align: center;">Artistic skills and competences</p>	<ul style="list-style-type: none"> • Study of the music for liturgical church organ • He used to play keyboards in a rock band for about 6 years • He has been playing martial arts (judo) for about 25 years (II DAN) 										
<p style="text-align: center;">Other skills and competences</p>	<p>English language competence</p> <ul style="list-style-type: none"> • Intensive course in the foreign countries at the Berlitz School in London (2 weeks) • Course in the foreign countries at the San Diego Miramar College (2 weeks) • Intensive course in Italy at the Teach-In school in Rome (1 week) • Course in Italy at the Wall Street Institute (2 years) 										
<p style="text-align: center;">Driving license</p>	<ul style="list-style-type: none"> • Italian Driving license B type 										

Patent and Publications

Patent	<ul style="list-style-type: none">• Patent on invention: <u>"Genetic Algorithm applied on GSM Radio Access Network Optimization":</u> Patent number: ITRM20010718 Publication date: 2003-06-06 Inventor: MICHELI DAVIDE Applicant: TELECOM ITALIA MOBILE SPA (IT) Application number: IT2001RM00718 20011206 Priority number(s): IT2001RM00718 20011206• Patent on invention: <u>"Method and system for determining road traffic jams based on information derived from a PLMN"</u> Patent number: WO2009083028 Publication date: 2009-07-09 Inventor: MICHELI DAVIDE and COLONNA MASSIMO Applicant: TELECOM ITALIA SPA (IT) Application number: WO2007EP64580 20071227 Priority number(s): WO2007EP64580 20071227
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Publications

- Davide Micheli, Carmelo Apollo, Roberto Pastore, Ramon Bueno Morles, Daniele Barbera, Mario Marchetti, Gabriele Gradoni, Member, IEEE Valter Mariani Primiani, Member, IEEE, and Franco Moglie, Member, IEEE. **Optimization of Multilayer Shields Made of Composite Nanostructured Materials**, IEEE TRANSACTIONS ON ELECTROMAGNETIC COMPATIBILITY. Date of Publication: 08 novembre 2011, DOI: [10.1109/TEMC.2011.2171688](https://doi.org/10.1109/TEMC.2011.2171688)
- Davide Micheli, Roberto Pastore, Carmelo Apollo, Mario Marchetti, Gabriele Gradoni, Member, IEEE Valter Mariani Primiani, Member, IEEE, and Franco Moglie, Member, IEEE. **Broadband Electromagnetic Absorbers using Carbon Nanostructure-Based Composites**, IEEE Transactions on Microwave Theory and Techniques, 29 July 2011, DOI: [10.1109/TMTT.2011.2160198](https://doi.org/10.1109/TMTT.2011.2160198)
- Davide Micheli, Carmelo Apollo, Roberto Pastore, Ramon Bueno Morlesa, Susanna Laurenzi, Mario Marchetti, **Nanostructured Composite Material for Electromagnetic Interference Shielding Applications**, Acta Astronautica, Science Direct, Elsevier, available online 29 June 2011, [doi:10.1016/j.actaastro.2011.06.004](https://doi.org/10.1016/j.actaastro.2011.06.004)
- Mario Marchetti, Davide Micheli, Carmelo Apollo, Roberto Pastore, **Nanostructured Composite Material for Electromagnetic Interference Shielding Applications**, IAC 2010 Prague- 61st, International Astronautic Congress, Session: Specialized Technologies, including Nanotechnology, 27/09-01/10/2010.
- Mario Marchetti, Plinio Cloluzzi, Carmelo Apollo, Roberto Pastore, Davide Micheli **Temperature, Atomic Oxygen and Outgassing effects on dielectric parameters and electrical properties of Nanostructured Composite Carbon-based Materials**, IAC 2010 Prague- 61st, International Astronautic Congress, Session: Space Environmental Effects and Spacecraft Protection, 27/09-01/10/2010
- Davide Micheli, Carmelo Apollo, Roberto Pastore, Mario Marchetti, **Modeling of Microwave Absorbing Structure using Winning Particle Optimization applied on Electrically Conductive Nanostructured composite material**, ICEM 2010 Roma- XIX International Conference on Electrical Machines, TPC-6: Theory, Modeling and Design, IEEE Industrial Electronics Society (IEE), September 6-8-2010 Rome, simposium DOI: [10.1109/ICELMACH.2010.5607881](https://doi.org/10.1109/ICELMACH.2010.5607881)
- Roberto Pastore, Davide Micheli, Carmelo Apollo, Mario Marchetti, Gabriele Gradoni **Ballistic characterization of nanocomposite materials by means of "Coil Gun" electromagnetic accelerator**, ICEM 2010 Roma- XIX International Conference on Electrical Machines, IEEE Industrial Electronics Society (IEE), September 6-8-2010 Rome, symposium, DOI: [10.1109/ICELMACH.2010.5607827](https://doi.org/10.1109/ICELMACH.2010.5607827)
- Laura Pierucci° IEEE Member, Alessandra Romoli°, Romano Fantacci° IEEE Senior Member and Davide Micheli, **An Optimized Neural Network for monitoring Key Performance Indicators in HSDPA**, IEEE Symposium on Personal, Indoor and Mobile Radio Communications 2010 (PIMRC '10), DOI: [10.1109/PIMRC.2010.5671580](https://doi.org/10.1109/PIMRC.2010.5671580)
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **Nanomaterials in Radar Absorbing Materials design using Particle Swarm Optimization and Genetic Algorithm**, *50th ISRAEL ANNUAL CONFERENCE ON AEROSPACE SCIENCES*, Conference tag number: 50IACAS-542, Feb. 2010. [link](#)
- Davide Micheli, Roberto Pastore, Carmelo Apollo, Mario Marchetti, **X-Band microwave characterization of carbon-based nanocomposite material, absorption capability comparison and RAS design simulation**, *Composites Science and Technology*, [doi:10.1016/j.compscitech.2009.11.015](https://doi.org/10.1016/j.compscitech.2009.11.015), December 2009. [link](#)
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **X-BAND MICROWAVE CARBON BASED NANOCOMPOSITE MATERIAL CHARACTERIZATION**, *Nanoscience and Nanotechnology 2009, INFN-Laboratori nazionali*, Frascati 19-22 October 2009. [link](#)

Publications

- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, G.Gradoni, V.Mariani, F.Moglie. **Carbon Based Nanomaterial Composites in RAM and Microwave Shielding Applications**, *IEEE NANO 2009, NANO-ELECTRONICS*, Genoa July 26-30 2009. [Nanotechnology, 2009. IEEE-NANO 2009. 9th IEEE Conference on link](#)
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **X-BAND MICROWAVE NANO-COMPOSITE CARBON BASED MATERIAL CHARACTERIZATION AND ABSORPTION CAPABILITY COMPARISON**, *XX AIDAA Conference*, June 29-July 3 2009, Milano, Italy. [link](#)
- S.Mileti, D.Micheli, M.Marchetti, **Low CTE Waveguide for Extreme Thermal Environment**, [IAC-08-C2.6.06, *International Astronautic Federation*, 09/2008. [link](#)
- D.Micheli, G.Cerri, M.Marchetti, **Electromagnetic Shield against Space Radiations**, *1ST INTERNATIONAL ACADEMY OF ASTRONAUTICS – RUSSIAN ACADEMY OF COSMONAUTICS BY K.E. TSIOLKOVSKY CONFERENCE «SPACE FOR HUMANITY*, Korolev City, April 22, 2008; [link](#)
- D.Micheli, G.Cerri, M.Marchetti, **Electromagnetic Shield against Space Radiations**. *International Russian-American Journal, Actual Problems in aviation and aerospace system*, ISSN 1727-6853, (No.2(27)), v.13, 68-85, Kazan-Daytona Beach, 2008..
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **NANOTECHNOLOGY RESEARCH FOR ADVANCED AEROSPACE SOLUTIONS**, *China 2009*.
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **X-Band Microwave Carbon-based Nanocomposite Material Characterization**, *Nanotec2009.it*, Rome, March 31 – April 3, 2009. [link](#)
- D.Micheli, R.Pastore, C.Apollo, M.Marchetti, **Nanostructured Composite Material for Space Radiation Shielding**, *International Conference Samara, SCIENTIFIC AND TECHNOLOGICAL EXPERIMENTS ON AUTOMATED SPACE VEHICLES AND SMALL SATELLITES*, September 2-5, 2008, Section 2. Problems of space experiments support.
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **An automated procedure for the location of radio base stations in a cellular network**, *Electrical Engineering and Electromagnetics VI, WIT Press*, 2003, pp. 63-70. http://www.davidemicheli.com/download_cartel/IEE_Com_genetico_04pdf.zip
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **Base Station Network Planning including Environmental Impact Control**, in *IEE Proc. Communications*, Vol. 151, No. 3, June 2004, pp. 197-203. DOI : [10.1049/ip-com:20040146\(410\)151](https://doi.org/10.1049/ip-com:20040146(410)151)
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **Optimized Planning for Base Station Location**, *Proc. of the International Symposium on Electromagnetic Compatibility, EMC Europe 2002*, Sorrento, September 9-13, 2002, pp. 463-466.
- M. Bozzetti, G. Cerri, R. De Leo, D. Micheli, P. Russo, P. Semenzato, **"Ottimizzazione della posizione di BSA per minimizzare l'impatto ambientale: la città di Bitonto"** *Atti della Riunione Generale AEI*, pp.287-292. Padova, 4-5-Ottobre 2001
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **"An automated procedure for the location of radio base stations in a cellular network"** Accepted for the Electrocomp 2003 conference, Split, Croatia.
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **"Base Station Environmental Impact Control by Network Planning"** *IEEE Trans. on EMC*, Submitted for publication.
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **"Minimizzazione dell'impatto ambientale dei campi em mediante posizionamento automatizzato di SRB."** *Atti della XIV RINEM*, pp.492-495, Ancona 16-19 Settembre 2002.
- G. Cerri, R. De Leo, D. Micheli, P. Russo, **"Reduction Of Electromagnetic Pollution In Mobile Communication Systems By An Optimized Location Of Radio Base Stations"** *Proceedings of the XXVIIth General Assembly of the International Union of Radio Science*, Maastricht, 17-24 Agosto 2002.

Book	<ul style="list-style-type: none"> • Davide Micheli, <i>Book: Radar Absorbing Materials and Microwave Shielding Structure Design</i>, ISBN 978-3-8465-5939-0, hard cover, 420 pages. <i>Lambert Academic Publishing</i>. 2012 • Davide Micheli, Carmelo Apollo, Roberto Pastore, Ramon Bueno Morles, Gabriele Gradoni and Mario Marchetti, <i>Chapter of Book: Advances in Nanocomposites - Synthesis, Characterization and Industrial Applications</i> ", ISBN 978-953-307-165-7, Hard cover, 966 pages Title of chapter: Electromagnetic characterization of Composite Materials and Microwave Absorbing Modeling . INTECH Open Access Publisher, http://www.intechopen.com/books/show/title/advances-in-nanocomposites-synthesis-characterization-and-industrial-applications • Davide Micheli, Carmelo Apollo, Gabriele Gradoni, Roberto Pastore, Ramon Bueno Morles, Mario Marchetti, <i>Book: Electromagnetic absorption and shielding of composite materials and nanomaterials</i>, First Edition ", ISSN 18264697, soft cover, 296 pages. Sapienza University of Rome, School of Aerospace Engineering. The Book is not on line for sale. • M.Moroni, D.Micheli, Chapter of Book: <i>Progettazione fotovoltaica in conto energia</i> link
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