

Ph.D. Student in Computer Science and Engineering

Personal information

Gender: Male

Date of birth: March, 31st, 1981

Place of birth: Bari (Italy)

Citizenship: Italian

Marital status: Not married

Fiscal code: CPRNHL81C31A662T

Contact information

Work address

Nicholas Caporusso (CSE XXIII)
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Home address

Nicholas Caporusso
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Education

• Master of Computer Science (Magna cum Laude) with specialization in Interactive systems

Thesis title: "*Multimodal Feedback for Portable Brain-Computer Interfaces*"

Academic supervisor: Prof. Maria Francesca Costabile (Department of Computer Science, University of Bari, Via E. Orabona, 4 - 70125 Bari)

External supervisor: Ing. Febo Cincotti (Department of Electrical Engineering, University "La Sapienza" - Piazzale Aldo Moro 5 - 00185 Roma, and I.R.C.C.S. "Fondazione Santa Lucia" - via Ardeatina, 306 - 00144 Rome)

Graduation date: March, 8th 2007

• Bachelor of Science in Informatics and Digital Communication (Magna cum Laude)

Thesis title: "*System for enabling deafblind people to communicate using Malossi method*"

Academic supervisor: Prof. Fiorella De Rosis (Department of Computer Science, University of Bari, Via E. Orabona, 4 - 70125 Bari)

Graduation date: July, 18th 2004

• "Liceo Classico" High school (final grade: 80/100)

Year: 1999

Languages

• English: TOEFL Certification (score 108/120) - December 12th, 2007.

reading: 30/30, listening 29/30, speaking 22/30, writing 27/30;

• French: basic knowledge

Employment and job experience

2010

- *January - Present day:* enrolled (with scholarship and lodging) in the XXIII PhD Program of Computer Science and Engineering at *IMT Institute for Advanced Studies* in Lucca;
- *January - Present day:* scientific collaborator of the Neuroanesthesia department of the Neurological Institute "C.Besta" (Milan - IT) for the project "*Assessing safety during patient transport*"
- *January - Present day:* scientific coordinator of "*Q.I.R.I.S.*" (Caronno Pertusella - Va - IT);
- *January - Present day:* president of "*Mi.Ni.Be.Ca.*" (Bari - IT);

2009

- *January - December:* enrolled (with scholarship and lodging) in the XXIII PhD Program of Computer Science and Engineering at *IMT Institute for Advanced Studies* in Lucca;
- *July - December:* employed as a research collaborator in the "*Institute of Infocomm Research (I2R)*" of the "*Agency for Science, Research and Technology (A*STAR)*" (Singapore);
- *April - December:* scientific coordinator of "*Q.I.R.I.S.*" (Caronno Pertusella - Va - IT);
- *March - December:* president of "*Mi.Ni.Be.Ca.*" (Bari - IT);

2008

- *March - December:* enrolled (with scholarship and lodging) in the XXIII PhD Program of Computer Science and Engineering at *IMT*

Institute for Advanced Studies in Lucca;

- *January - March*: enrolled (with scholarship) in the XXIII PhD Program of Computer Science in the *University of Bari*;

2007 (*While attending University courses, until March*)

- *September - December*: employed as research collaborator in the Interaction Visualization and Usability Laboratory (IVULab) of the Department of Computer Science of the University of Bari;
- *January - September*: freelance IT consultant for several companies in Bari;
- *January - July*: employed as research collaborator in the Neurophysiopathology laboratory of the Research Institute *I.R.C.C.S. "Fondazione Santa Lucia"* (Rome - IT);

2006 (*While attending University courses*)

- *October - December*: freelance research collaborator in the Neurophysiopathology laboratory of the Research Institute *I.R.C.C.S. "Fondazione Santa Lucia"* (Rome - IT);
- *May - October*: vice editor of the newspaper *BariMia.it* (Bari);
- *January - December*: freelance IT consultant for *Withforce s.r.l.* (Frosinone);

2005 (*While attending University courses*)

- *November - December*: freelance IT consultant for *Withforce s.r.l.* (Frosinone - IT);

2004 (*While attending University courses*)

- *April - December*: freelance consultant for *Online Italia Network* (Valenzano - IT);
- *January - March*: employed as project manager in *The Web Agency* (Bari);

2003 (*While attending University courses*)

- *June - December*: employed as project manager in *The Web Agency* (Bari);
- *January - May*: employed as web designer/web master in *The Web Agency* (Bari);

2002 (*While attending University courses*)

- *March - December*: employed as web designer/web master in *The Web Agency* (Bari);
- *January*: freelance web master per *PugliaSport.com* (Bari);
- *January - April*: freelance web designer e web master per *Net Consulting* (Bari);
- *January - February*: freelance web consultant per *Cooperativa Grafica Italiana* (Bari);

2001 (*While attending University courses*)

- *September - December*: freelance web designer/web master for *EstroWeb s.r.l.* (Modugno - IT);
- *January - December*: freelance web master for *PugliaSport.com* (Bari);
- *January - October*: employed as web designer/web master in *Comma3 s.r.l.* (Bari);

2000-(*While attending University courses, from September*)

- *September - December*: freelance web designer/web master for *EstroWeb s.r.l.* (Modugno - IT);
- *June - December*: freelance project manager for *PugliaSport.com* (Bari);
- *March - September*: freelance web design teacher for *Studio Delta s.r.l.* (Bari);
- *January - December*: employed as web designer/web master in *Comma3 s.r.l.* (Bari);

1999

- *October - December*: employed as web designer/web master in *Comma3 s.r.l.* (Bari);

Research

Publications

Journal Papers (peer-reviewed)

- Nicholas Caporusso, Lusine Mkrtchyan, and Leonardo Badia, "*A Multimodal Interface Device for Online Board Games Designed for Sight-Impaired People*" in *Transactions on Information Technology in BioMedicine*, 2009. To be published.
- Febo Cincotti, Laura Kauhanen, Fabio Aloise, Tapio Palomäki, Nicholas Caporusso, Pasi Jylänki, Donatella Mattia, Fabio Babiloni, Gerolf Vanacker, Marnix Nuttin, Maria Grazia Marciani, and José del R. Millán. "*Vibrotactile Feedback for Brain-Computer Interface Operation*", in *Computational Intelligence and Neuroscience*, 2007. ID 48937, 12 pages, Hindawi Publishing Corporation, DOI:10.1155/2007/48937. [Online] <http://www.hindawi.com/journals/cin/2007/048937.pdf>.

Conference Papers/Posters (peer reviewed)

- Nicholas Caporusso, "*Remodeling the Assessment of Social Acceptance of Technology for Health Care*" to appear in *Proceedings of the 3rd International Congress on Interpersonal Acceptance and Rejection*, 2010.
- Nicholas Caporusso, "*A Device for Measuring Potentially Hazardous Forces on Medical Equipment for Patient Transport*" to appear in *Proceedings of the 4th IEEE International Conference on Pervasive Computing Technologies for Healthcare*, 2010.
- Nicholas Caporusso, "*Including Personality in e-Learning Design*" to appear in *Proceedings of the International Workshop of the Guide Association*. Rome (2010).
- Nicholas Caporusso, "*A Light-Weight Framework For Including Individual Styles In E-Learning Tools*" to appear in *Proceedings of the 3rd International Conference of the International Association for Development of the Information Society Association*. Porto (2010).
- Nicholas Caporusso, Irene Lasorsa, "*The Difference between Acceptability and Acceptance: A Case Study in Fall Prevention*" to appear

- in Proceedings of the 6th International Conference of the Technology, Knowledge and Society Association. Berlin (2010).
- Nicholas Caporusso, “*Darwinismo e informatica: Brain-Computer Interface e Coevoluzione Uomo-Macchina*” to appear in Proceedings of the 6th Annual Workshop of the Italian Association for Cognitive Sciences (AISC).
- Nicholas Caporusso, “*Personality-Aware Interfaces for Learning Applications*” to appear in Proceedings of the ACM International Conference of the Special Interest Group on University and College Computing Services (SIGUCCS), 2009.
- Irene Lasorsa, Nicholas Caporusso, Oliviero Rinaldi, Leonardo la Pietra, Massimo Monturano, Sandra Lai, and Loredana Lunghi, “*User Evaluation of Multifaceted Activity Monitoring System for Fall Prevention*” in Proceedings of the 19th International Conference of the International Society for Posture & Gait Research, 2009. To be published.
- Nicholas Caporusso, Irene Lasorsa, Oliviero Rinaldi, and Leonardo la Pietra, “*A Pervasive Solution for Risk Awareness in the context of Fall Prevention*” in Proceedings of the 3rd IEEE International Conference on Pervasive Computing Technologies for Healthcare, 2009. DOI=10.4108/ICST.PERVASIVEHEALTH2009.5980. [Online] <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5191215&isnumber=5191145>.
- Nicholas Caporusso, “*Design of a Malossi Interface for Deafblind People*” in Proceedings of the First Usability Professionals Association European regional conference (UPAEurope), 2008. [Online] <http://www.upaeurope2008.org/m-materiali/Poster-UPAEurope2008-Caporusso.pdf>.
- Nicholas Caporusso, Lusine Mkrtychyan, and Leonardo Badia, “*Multimodal Network Board Games for Blind People*” in Proceedings of the First Usability Professionals Association European regional conference (UPAEurope), 2008. [Online] <http://www.upaeurope2008.org/m-materiali/Poster-UPAEurope2008-Mkrtychyan.pdf>.
- Nicholas Caporusso, Lusine Mkrtychyan, and Leonardo Badia, “*A Multimodal Network Board Game System for Blind People*” in Proceedings of the IEEE International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL), 2008. DOI=10.1109/ISABEL.2008.4712592. [Online] <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4712592&isnumber=4712569>.
- Nicholas Caporusso, “*Selective Beam Discovery Techniques for VANETs*” to appear in Proceedings of the ACM International Conference on Mobile Technology, Applications and Systems (Mobility) 2008. 4 pages.
- Nicholas Caporusso, “*A Wearable Malossi Alphabet Interface for Deafblind People*” in Proceedings of the ACM International Conference on Advanced Visual Interfaces (AVI) 2008. Pages 445-448, ISBN:1-978-60558-141-5. DOI=<http://doi.acm.org/10.1145/1385569.1385655>. [Online] http://portal.acm.org/ft_gateway.cfm?id=1385655&type=pdf&coll=GUIDE&dl=GUIDE&CFID=48987006&CFTOKEN=90602753.
- Thomas Pederson, Antonio Piccinno, D. Surie, Carmelo Ardito, Nicholas Caporusso, L.-E. Janlert, “*Framing the Next-Generation Desktop using Proximity and Human Perception*”, in ACM International Conference on Computer-Human Interaction (CHI), 2008. [Online] <http://www.itu.dk/people/tped/pubs/PedersonPiccinnoSurieArditoCaporussoJanlertCHI2008wsSubmitted.pdf>.
- Fabio Aloise, Nicholas Caporusso, Donatella Mattia, Fabio Babiloni, Laura Kauhanen, José del R. Millán, Marnix Nuttin, Maria Grazia Marciani, and Febo Cincotti, “*Brain-Machine Interfaces through Control of Electroencephalographic Signals and Vibrotactile Feedback*”, in Proceedings of the 12th International Conference on Human-Computer Interaction, 2007. [Online] ftp://ftp.idiap.ch/pub/reports/2007/millan_2007_hcii.pdf.
- Febo Cincotti, Laura Kauhanen, Fabio Aloise, Tapio Palomäki, Nicholas Caporusso, Pasi Jylänki, Fabio Babiloni, Gerolf Vanacker, Marnix Nuttin, Maria Grazia Marciani, José del R. Millán, D. Mattia “*Preliminary Experimentation on Vibrotactile Feedback in the context of Mu-rhythm Based BCP*”, in Proceedings of 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007. Pp. 4739 - 4742. doi:10.1109/IEMBS.2007.4353398. [Online] <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4353398&isnumber=4352185>.
- Febo Cincotti, Laura Kauhanen, Fabio Aloise, Tapio Palomäki, Nicholas Caporusso, Pasi Jylänki, Donatella Mattia, Fabio Babiloni, Gerolf Vanacker, Marnix Nuttin, Maria Grazia Marciani, and José del R. Millán. “*Vibrotactile Feedback in the context of Mu-rhythm Based BCP*”, in Proceedings of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007. [Online] ftp://ftp.idiap.ch/pub/reports/2007/millan_2007_embs.pdf.

Technical reports / Theses / Other

- Irene Lasorsa, Nicholas Caporusso (co-supervisor), “*Fallarm: una soluzione tecnologicamente avanzata al problema delle cadute accidentali*”, in Advanced course in Hospital Risk Management, CINEAS - Milan (Italy)
- Febo Cincotti, Fabio Babiloni, Fabio Aloise, Alessandro Amadoro, Nicholas Caporusso, Laura Kauhanen, Tapio Palomäki, Marnix Nuttin, Gerolf Vanacker, Maria Grazia Marciani, and José del R. Millán. “*Vibrotactile Feedback in the context of Mu-rhythm Based BCP*”. November 05, 2006. International Workshop of the European IST Programme FET Project FP6-003758.

Patents

- "Manipulable device for bimanual interaction by means of pressure, rotation and translation of multiple knobs", 2010 - Present date
- "Interactive device for representing contextual information of digital documents in the form of iconic vibrotactile stimuli", 2010 - Present date
- "Device for alerting to potentially dangerous forces impacting on medical equipment for patient transport", 2009 - Present date
- "System enabling deafblind people to communicate using the Malossi method", 2004 - Present date

Awards

- 2009 "Best Science and Technology innovation project award" by Regione Puglia for the work “*A Wearable Malossi Alphabet Interface for Deafblind People*” in the context of the prize "Bollenti Spiriti - Principi Attivi";
- 2008 "Best thesis award" by Advanced course in Hospital Risk Management, CINEAS - Milan (Italy) for the work “*Fallarm: una soluzione tecnologicamente avanzata al problema delle cadute accidentali*” by Irene Lasorsa, Nicholas Caporusso (as co-supervisor);
- 2008 "Best master thesis award" by Italian Association for Automatic Calculus (Associazione Italiana Calcolo Automatico A.I.C.A.) and Confindustria Servizi Innovativi e Tecnologici;

Teaching

2009

- “*La pianificazione di una strategia multidisciplinare per la prevenzione delle cadute accidentali*” - AIRISS Associazione Italiana Rischio in Sanità;

Academic year 2007-2008

- Tutor of the course of *Computer Programming* for the Department of Computer Science of the University of Brindisi;
- Tutor of the course of *Architecture of Calculators* for the Department of Computer Science of the University of Brindisi;

References

Prof. Ugo Montanari

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Prof. Salvatore Caporaso

Full Professor
Department of Computer Science
University of Bari
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Ph.D. Leonardo Badia

Young Research Fellow
Computer Science and Engineering
IMT Institute for Advanced Studies
P.zza S. Ponziano, 6 - 55100 Lucca (Italy)
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Personal interests

Music and writing

- Member, as composer and author, of Italian Association of Authors and Editors (SIAE) since 1997;
- Composer and author of 100 songs (approximately);
- 2009 - Awarded with the "Premio il romanzo" award for the novel "Il canto della sirena";
- 2008 - Awarded with the "Comune di Castorano" poetry award for the song "Neve verso il cielo";
- 2008 - Awarded with the "Calicanthus" poetry award for the haiku "Haiku di stelle";
- 2006 - Awarded with the "Neaples Cultural Classic" prize Diploma for the poem "Acqua sul muro";
- 2001 - Awarded with the "Poet D.O.C." Diploma for the poem "E' il vento";