CURRICULUM VITAE
Francesca Odone

Professore Ordinario (INF/01 – Informatica)
Scuola di Scienze Matematiche Fisiche e Naturali
Dipartimento di Informatica Bioingegneria Robotica e Ingegneria dei Sistemi (DIBRIS)
Università degli Studi di Genova
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Data e luogo di nascita –

Istruzione

- 2002 - Dottorato di Ricerca in Informatica (Università degli Studi di Genova).
- 1997 - Laurea cum laude in Scienze dell'Informazione (Università degli Studi di Genova)

Posizioni ricoperte

- *Posizione Attuale (dal 1/11/2020): Professore Ordinario SSD INF/01, afferente al Dipartimento di Informatica Bioingegneria Robotica e Ingegneria dei Sistemi (DIBRIS) dell'Università di Genova*

- 1/12/2014-31/10/2020: Professore Associato SSD INF/01, afferente al Dipartimento di Informatica Bioingegneria Robotica e Ingegneria dei Sistemi (DIBRIS) dell'Università di Genova

- 14/09/2008-21/02/2009 - Congedo per maternità (legge 30/12/71 n. 1204)

- 30/12/2005 - 30/11/2014 Ricercatore Universitario SSD INF/01, in servizio presso Università degli Studi di Genova (Ricercatore Confermato dal 30/12/2008)

- 1/8/2005-29/12/2005 - Assegnista di Ricerca (SSD MAT/08 - Analisi Numerica) presso l'Università di Ferrara (interrotto per incompatibilità con posizione successiva)

- 1/7/2002-31/7/2005 - Ricercatore a tempo determinato presso l'Istituto Nazionale di Fisica della Materia (INFM).

- 1/4/2002-30/6/2002 - Assegnista di Ricerca (SSD INF/01 - Informatica) presso l'Università di Genova (interrotto per incompatibilità con posizione successiva)

- 1/2/1999-29/2/2000 - Visiting PhD Student presso la Heriot-Watt University di Edimburgo con una borsa di studio EU Marie Curie Training and Mobility Research ERB4001GT-97-3072

- 1/5/1997-31/12/1997 - Research Associate presso la Heriot-Watt University di Edimburgo

Ruoli istituzionali

Ruoli, commissioni e Collegio Docenti

- Dal 2020 Vice Direttore del Dipartimento di Informatica Bioingegneria Robotica e Ingegneria dei Sistemi (DIBRIS) dell'Università di Genova

- Dal 2020 Membro del collegio di Scuola SMFN in rappresentanza del Direttore del DIBRIS

- Dal 2020 Membro della Giunta del DIBRIS

- Dal 2017 *membro della Commissione AQ* del DIBRIS
- Dal 2014 *membro del Collegio dei Docenti del Dottorato di Informatica* e Ingegneria dei Sistemi. Segretario del Collegio fino al 2016. *Referente del curriculum in Computer Science*
- 2013 *membro del Collegio dei Docenti del Dottorato di Informatica*. Segretario del Collegio

- Dal 2010 *membro della Commissione Promozione, Orientamento e Tutorato* del CCS Informatica (referente della Commissione stessa dal 2011 al 2013)
- 2015 - 2020 *Coordinatore della Commissione Ricerca del DIBRIS*,
- 2015 - 2020 *referente VQR* e *referente SUA-RD* per il DIBRIS.
- 2012 - 2015 *membro della Commissione Ricerca* del DIBRIS

Commissioni di concorso

- Dicembre 2020 – Dissertation committee member, Marquette University, Doctorate – Electrical & Computer Engineering (EECE)
- Ottobre 2020 - *membro della commissione d'esame di dottorato in Bioingegneria e Robotica* Università di Genova
- Luglio 2018 - *Membro della commissione giudicatrice del concorso per l'ammissione al dottorato di ricerca* in Informatica e Ingegneria dei Sistemi (curriculum Informatica) con sede Università di Genova, XXXiV ciclo
- Luglio 2016 - *Membro della commissione giudicatrice del concorso per l'ammissione al dottorato di ricerca* in Informatica e Ingegneria dei Sistemi (curriculum Informatica) con sede Università di Genova, XXXII ciclo
- Novembre 2016 Presidente della Commissione di Concorso per posizione a tempo determinato Cat. D tempo pieno, DIBRIS Università di Genova.
- Aprile 2016 *membro della commissione d'esame di dottorato* in Ingegneria Industriale e dell'Informazione, Università degli Studi di Udine
- Febbraio 2016 *membro della commissione d'esame di dottorato* in Matematica e Statistica per le Scienze Computationali, Università degli Studi di Milano
- Settembre 2014 - *Membro della commissione giudicatrice del concorso per l'ammissione al dottorato di ricerca* in Informatica e Ingegneria dei Sistemi (curriculum Informatica) con sede Università di Genova, XXX ciclo
- Aprile 2013 - *membro della commissione d'esame di dottorato* in Tecnologie dell'Informazione ARCES Università di Bologna per il conferimento del titolo di dottore di Ricerca a Filippo Piccinini e Francesca Galluzzo (XXV ciclo)
- Aprile 2013 - *membro della commissione d'esame di dottorato* in Informatica, Università di Verona, per il conferimento del titolo a Roberto Toldo, Valeria Garro (XXV ciclo)
- Novembre 2011 - *membro della commissione giudicatrice del concorso per l'ammissione al dottorato di ricerca* in Informatica, scuola in Scienze e Tecnologie per l'Informazione e la Conoscenza con sede Università di Genova, XXVII ciclo
- Aprile 2011 - *membro della commissione d'esame di dottorato* in Tecnologie dell'Informazione ARCES Università di Bologna per il conferimento del titolo di dottore di Ricerca a Florian Ries, Ludovico Carozza, Martino Alessandrini (XXIII ciclo)
- Maggio 2010 - *membro della commissione esaminatrice* della procedura selettiva per titoli ed esami per l'accesso alla categoria EP, nominata con decreto n. 228 del 30/3/2010
- 2011-2012 - *membro* della Commissione Didattica CCS di Informatica
- Novembre 2009 - *membro della commissione giudicatrice del concorso per l'ammissione al dottorato di ricerca* in Informatica, scuola in Scienze e Tecnologie per l'Informazione e la Conoscenza con sede Università di Genova, XXV ciclo
- 2008-2010 - *membro* della Commissione Tirocini del CCS di Informatica

Fellowship e premi

- 1997 Fellowship per attività di ricerca presso la Heriot Watt University, Edinburgh UK

- 02/1999-02/2000 EU Marie Curie Fellowship per attività di ricerca presso la Heriot Watt University, Edinburgh UK
- Springer Best Student Paper Award alla Asian Conference in Computer Vision (ACCV2007) relativo all'articolo "A regularized approach to feature selection for face detection" (A. Destrero, F. Odone, C. De Mol, A. Verri)
- Elsevier award "Top Cited Article 2005-2010" Journal: Graphical Models relativo all'articolo "SVD-matching using SIFT features" (E. Delponte, F. Isgro, F. Odone, A. Verri)
- Premio ChaLearn Gesture Challenge 2012 (CVPR 2012) "All Gestures you can: a memory game" (I. Gori, S. Fanello, F. Odone, G. Metta)
- Honorable Mention for the paper "One-Shot Learning for Real-Time Action Recognition" ibPRIA 2013 (I. Gori, S. Fanello, F. Odone, G. Metta)
- Best Paper Aqard at WoRV 2013 for the paper "A compositional approach for 3D arm-hand action recognition" (I. Gori, S. Fanello, F. Odone, G. Metta)
- IAPR Best Paper Award at ICIAP 2013 for the paper "Structured multi-class feature selection for effective face recognition" (L. Zini, G. Fusco, N. Noceti, F. Odone)
- Nature Research Highlight “Robot can single out humans” 16 giugno 2017

Attività Didattica

Dal 2002 al 2005 professore a contratto presso l'Università degli Studi di Genova e l'Università di Modena e Reggio Emilia. Dal 2006, titolare di vari corsi di Visione Computazionale e Elaborazioni di Immagini per le L, LS, LM in Informatica. Dal 2010, docente di Introduzione alla Programmazione, corso del primo anno della Laurea in Informatica. Dal 2013 al 2019 docente del corso di Computer Vision per la Laurea Magistrale in Robotics Engineering. Dal 2017 docente del corso Analisi Automatica di Immagini e Video per la Laurea Magistrale in Digital Humanities.

Relatore di 35 tesi di Laurea (Vecchio Ordinamento, Specialistica, Magistrale) in Scienze dell'Informazione, Informatica, Matematica, Fisica (Università di Genova). Relatore di 33 progetti finali di Laurea Triennale in Informatica.
Nel 2010 il Dr Luca Zini, del quale è stata relatore di tesi di laurea Specialistica, ha vinto il premio AICA-Confindustria come miglior tesi del settore ICT con una tesi dal titolo "Metodi di localizzazione di testi in immagini".

Attività didattica dal 2015:

2014-2015
- Computer Vision and Computer Graphics (modulo 1 - CFU 6) - LM Informatica - Scuola SMFN
- Computer Vision (CFU 3) LM Robotics Engineering - Scuola Politecnica

2015-2016
- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 80402 - Computer Vision and Computer Graphics (modulo 1 - CFU 6) - LM Informatica - Scuola SMFN
- cod 80512 - Computer Vision (CFU 3) LM Robotics Engineering - Scuola Politecnica

2016-2017
- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 90528 Computer Graphics and Augmented REality (CFU 3) LM in Computer Science - Scuola SMFN

- cod 80512 - Computer Vision (CFU 3) LM Robotics Engineering - Scuola Politecnica

2017-2018

- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 80512 - Computer Vision (CFU 3) LM Robotics Engineering - Scuola Politecnica
- cod 90539 - Computational Vision (CFU 6) LM in Computer Science - Scuola SMFN
- cod: 90689 - Analisi automatica di immagini e video (CFU 6) LM in Digital Humanities - Scuola Politecnica

2018-2019

- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 80512 - Computer Vision (CFU 3) LM Robotics Engineering - Scuola Politecnica
- cod 90539 - Computational Vision (CFU 6) LM in Computer Science - Scuola SMFN
- cod: 90689 - Analisi automatica di immagini e video (CFU 3) LM in Digital Humanities - Scuola Politecnica

2019-2020

- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 90539 - Computational Vision (CFU 6) LM in Computer Science - Scuola SMFN
- cod: 90689 - Analisi automatica di immagini e video (CFU 3) LM in Digital Humanities - Scuola Politecnica

2020-2021

- cod 80299 - Introduzione alla Programmazione (CFU 12) - LT Informatica - Scuola SMFN
- cod 90539 - Computational Vision (CFU 6) LM in Computer Science - Scuola SMFN
- cod: 90689 - Analisi automatica di immagini e video (CFU 3) LM in Digital Humanities - Scuola Politecnica

Attività nell'ambito dell'Alta Formazione

Dal 2007:

- *Supervisionato 14 dottorandi di ricerca.*
- *Finanziato e supervisionato l'attività di ricerca di 9 assegnisti e 7 titolari di borse di studio per attività di ricerca.*

Dal 2007 al 2015: 10 corsi di dottorato e di alta formazione, principalmente sul tema del Machine Learning. Il corso "regularization methods for high dimensional learning" organizzato e tenuto con Lorenzo Rosasco, ha avuto negli anni un ottimo riscontro da parte degli studenti e per questo motivo nel 2012 siamo stati invitati a tenerlo presso la Bertinoro International Spring School (BISS). Nel seguito maggiori dettagli sulla supervisione e sui corsi tenuti:

Dal 2013 *membro del Collegio dei Docenti del Dottorato di Informatica* (unito dal 2014 ad Ingegneria dei Sistemi, Computer Science and Systems Engineering), nel ruolo di Segretario del Collegio dal 2014 al 2016. Attualmente *referente del curriculum in Computer Science.*

Supervisione di dottorandi (attuali)

- Issa Mouawad (XXXV) Dottorato di Ricerca in Informatica e Ingegneria dei Sistemi
- Matteo Moro (XXXIV) Dottorato di Ricerca in Informatica e Ingegneria dei Sistemi
- Mina Sorial (XXXIII, co-tutela con Enrico Simetti) Dottorato in Bioingegneria e Robotica

Supervisione di dottorandi (passati)

- Nicoletta Noceti (XXII) Dottorato di Ricerca in Informatica "Learning to classify visual dynamic cues", 2010.

- Luca Zini (XXV) Dottorato di Ricerca in Informatica "Video-Surveillance methods with low constraints for the analysis of complex scenarios", 2013. Borsa di studio finanziata dalla Regione Liguria.
- Giovanni Fusco (XXV) Dottorato di Ricerca in Informatica - "Computer vision methods as an aid to visually impaired users", 2013. Borsa di studio finanziata dalla Regione Liguria.
- Sean Ryan Fanello (XXVI) Dottorato di Ricerca in Robotics, Cognition and Interaction Technologies (IIT) "Learning to see: visual recognition for humanoid robots" 2014.
- Alessandro Rudi (XXVI) Dottorato di Ricerca in Robotics, Cognition and Interaction Technologies (IIT) "Learning supspaces and sets a spectral approach", 2014.
- Alessandra Staglianò (XXV) Dottorato di Ricerca in Informatica "A weakly supervised framework for adaptive signal representation", 2014. Attualmente Senior Data Scientist at Euler Hermes London
- Miguel Alejandro Duval Poo (XXVII) Dottorato di Ricerca in Informatica "Low-level Visual Features with Shearlets", 2016. Attualmente Assegnista di Ricerca presso il DIMA Università di Genova
- Joan Sosa Garcia (XXVII) Dottorato di Ricerca in Informatica. " Content-based image retrieval on large-scale datasets using visual dictionaries" 2016. Attualmente Lead Data Scientist at IntegraWerks Jacksonville, Florida\
- Damiano Malafronte (XXX) Dottorato di Ricerca in Informatica e Ingegneria dei Sistemi “Spatio-Temporal Video Analysis and the 3D Shearlet Transform” 2018
- Alessia Vignolo (XXX) Dottorato di Ricerca in Bioingegneria e Robotica (co-tutela con Giulio Sandini e Alessandra Sciutti IIT)
- Gaurvi Goyal (XXXII) Dottorato di Ricerca in Informatica e Ingegneria dei Sistemi “Cross-view action recognition”
- Chiara Martini (XXXI) Dottorato in Bioingegneria e Robotica (co-tutela con Annalisa Barla) A protected discharge facility for the elderly: design and validation of a working proof-of-concept

Tutoring di dottorandi (passati)

- Augusto Destrero (XX) Dottorato di Ricerca in Informatica "Selecting features for face recognition from examples" (supervisor: Alessandro Verri)
- Elisabetta Delponte (XIX) Dottorato di Ricerca in Informatica "Local image descriptors for matching and classification" (supervisor: Alessandro Verri)

Assegnisti di ricerca

- Augusto Destrero
- Paolo Albini.
- Elisabetta Delponte.
- Nicoletta Noceti.
- Alessandra Staglianò.
- Luca Zini.
- Aitaç Kanaci.
- Miguel Alejandro Duval Poo.
- Joan Sosa Garcia.

Borse di studio per attività di ricerca

- Raffaele Puca (contratto Gigavision srl)
- Luigi Balduzzi (progetto Fondazione Carige)
- Giovanni Fusco (progetto Fondazione Carige)
- Silvia Villa (progetto Fondazione Carige)
- Luca Baldassarre (progetto Fondazione Carige)
- Sonia Menocci (contratto Thales Alenia)
- Valentina Russo (contratto Thales Alenia)
- Giorgio Cantarini

Corsi di dottorato

- 2014 - 2015 "Machine Leaning: a Crash Course" (20 ore) Tenuto con Lorenzo Rosasco nell'ambito delle attività di formazione del Polo Liguere delle Tecnologie Biomedicali Politecmed organizzata in collaborazione con il DIBRIS e il CBMM (Center for Brain Minds and Machines - MIT).

- 2008-2014 organizzazione e conduzione del corso di Dottorato "Regularization Methods for High Dimensional Machine Learning" con Lorenzo Rosasco nell'ambito del Dottorato in Informatica.
- Nel 2012 il corso " Regularization Methods for High Dimensional Machine Learning" è stato tenuto nell'ambito della Bertinoro International Spring School (BISS 2012), scuola annuale organizzata dal consorzio italiano dottorati in Informatica.
- 2007 - "Statistical Learning: Theory and Applications", corso organizzato per il Dottorato Europeo in Tecnologie dell'Informazione, ARCES Università di Bologna.

Altri corsi di alta formazione

- Dal 2002 al 2005 corso di 20 ore "*Disegno Automatico" per la Scuola di Specializzazione in Restauro di Monumenti, Facoltà di Architettura dell'Università di Genova.*

- *2007 "Advances of statistical learning and applications to computer vision" (4 ore)* Tutorial tenuto insieme al Dott Ernesto De Vito nell'ambito della conferenza International Conference on Image Analysis and Processing

- *2008 "Sensori intelligenti biometrici" (20 ore) Master Universitario Integrato di II livello Tecnologie Avanzate per Sistemi Intelligenti Integrati SIIT*

- *2013 "Elaborazione di immagini" (20 ore*) Attività di formazione del Polo Ligure delle Tecnologie Biomedicali Politecmed organizzata in collaborazione con il DIBRIS. Tenuto insieme a Patrizia Boccacci, 30 partecipanti

- *2014 e 2017 Lezioni sul tema Computer Vision presso la VVV School on Humanoid Robot Programming.*

- *2019 MAIA – Microsoft AI Academy – Digital Tree "Deep learning explained & AI applications" Tutoring e lezioni*

Programmi di scambio

- 2017: Marquette University Legacy initiative (PI Robert Scheidt), ha supportato la visita di Philipe Diaz (giugno 2017) studente di dottorato presso Marquette University

- *2017-2018: Erasmus+ KA107 International Credit Mobility* da e verso Marquette University (PI Maura Casadio), scambio di 3 studenti (MSc o Dottorato) su tematiche di computer vision.

Attività organizzativa

- Dal 2020 Associate Editor Elsevier Signal Processing: Image Communication
- Program co-chair CARE2020 International Workshop on Pattern Recognition for Positive Technology and Elderly wellbeing, satellite event of ICPR2020
- Dal 2019 Associate Editor IEEE Transactions on Emerging Topics in Computing (TETC)
- 2019 Guest Editor of the Spacial Section on Assistive Computing Technologies for Human Well-Being, IEEE Transactions on Emerging Topics in Computing (TETC)
- 2018, Frontiers in ICT, Research topic "Workplace of the future" (edito insieme a P Dvorak, E. Delponte, Konica Minolta)

- Giugno 2018 organizzazione (con Henry Medeiros) del BMVA Symposium - Computer Vision for smart environments and assisted living, London
- Ottobre 2012 - organizzazione (con Leila De Floriani), della Scuola "VISMAC 2012 - la Visione delle Macchine" (patrocinata dal GIRPR Gruppo Italiano Ricercatori in Pattern Recognition)
- Settembre 2006 - organizzazione (con Annalisa Barla e Alessandro Verri) del Bioinformatics meeting on machine learning for microarray studies of disease: biomarker selection.
- Comitati di programma: EG-IT 2010, ImaGrapp 2011, 3dRR workshop (ICCV 2011), ICIAP 2015.
- Valutatore (reviewer) delle seguenti riviste internazionali: IEEE Transactions on Image Processing, Pattern Recognition, Pattern Recognition Letters, Machine Vision Applications, Multimedia Tools and Applications, Computer Vision and Image Understanding, Information Sciences, Neural Computation, Int. Journal on Information Technology & Decision Making, Image and Vision Computing, IEEE Trans. on Systems, Man, and Cypernetics - part C
- Valutatore (reviewer) delle seguenti conferenze internazionali (dal 2009): 3dRR (2009-2011-2013), ICRA (2010, 2013), AVSS (2010,2012), ECCV (2010,2012, 2014, 2016), ACCV (2010), CVPR (dal 2011), BMVC (2011, 2019), ICCV (dal 2011,2013,), CBMS (2012), ICPR (a partire da 2012), Humanoids (a partire da 2012), IROS (2013), ICIAP (a partire da 2009)
- Area chair ICCV2019, ECCV 2020

Brevi periodi di visita seminari e cicli di lezioni su invito

- Luglio 2019 soggiorno di ricerca presso Marquette Univercity (Milwaukee, WI) (host: Henry Medeiros)
- Ottobre 2017 invito a presentare il paper apparso sulla rivista ACM ACCESS "Hands on visual recognition for visually impaired users" (Joan Sosa-Garcia and Francesca Odone) al convegno ACM ASSETS (Baltimore)
- Settembre 2017, *"The Shearlet Transform for image and video analysis".* Seminario su invito presso il College of Engineering, Marquette U, Milwaukee
- Settembre 2017, soggiorno di ricerca presso Marquette Univercity (Milwaukee, WI) (host: Robert Scheidt e Henry Medeiros)
- Maggio 2016 Invited talk al workshop Hardcore Data Science, Strata+Hadoop London, organizzato da Ben Lorica e Angie Ma
- Maggio 2014. Invited speaker al workshop ICRA "Active visual learning and hierarchical visual representations for general-purpose robot vision" organizzato da Ales Leonardis et al.
- Aprile 2007. *A regularized approach to feature selection for face detection,* DSI Università degli Studi di Milano (host: Raffaella Lanzarotti)
- Maggio 2006. *3D object recognition with local features,* Queen Mary University of London (host: Fabrizio Smeraldi e Andrea Cavallaro)
- Maggio 2006. *3D object recognition with local features,* Dipartimento di Matematica, Universita' di Ferrara (host Gaetano Zanghirati, Valeria Ruggiero)
- Novembre 2005. *Local image descriptors for image classification*, Dipartimento di Ingegneria dell'Informazione, Universita' di Modena e Reggio Emilia (host Rita Cucchiara).
- *Novembre 2004. Soggiorno di ricerca finanziato su network EU aim@shape presso il Weizmann Institute of Science, Israele (host Ronen Basri).*
- Novembre 2004. Seminario dal titolo *Image classification from examples--- ideas for a system that scales automatically*, Hebrew University e Weizmann Institute of Science, Israele.
- Settembre 2004. *Object detection with hypothesis tests* II. Invited talk, Convegno GIRPR, Perugia.

- Marzo 2004. *Immagine e apprendimento statistico, ovvero il computer puo' imparare a vedere?* Università di Ferrara (host: Gaetano Zanghirati).

- Ottobre 2003. *Building Image Classifiers*, Università di Modena e Reggio Emilia (host LZanni)

- Agosto 2002. Breve soggiorno presso la Heriot-Watt University, Edimburgo Scozia (host: Emanuele Trucco)

- Agosto 2002. *View-based object description for classification* Heriot-Watt University Edimburgo, Scozia

- Maggio 2001. *Un metodo di similarità fra immagini a livelli di grigio basato sulla distanza di Hausdorff*, presso Dipartimento Scientifico e Tecnologico, Università di Verona, (host: Vittorio Murino).

- Dicembre 2000. *Una nuova misura di similarità tra immagini a toni di grigio. Invited talk* Convegno GNIM, Bertinoro (FO)

- Dottorato Europeo in Tecnologie dell'Informazione (ARCES Università di Bologna) Corso di dottorato "Statistical Learning: Theory and Applications" (2007)

- BISS 2012 "Regularization Methods for High Dimensional Machine Learning" organizzata annualmente dal consorzio italiano dottorati in Informatica

- Corso di Geometria Proiettiva, Laurea Specialistica in Matematica, Università degli Studi di Torino (titolare del corso Prof F. Arzarello). Lezioni su invito (4 ore) sul tema "geometrical computer vision" (dicembre 2009 e febbraio 2011)

Attività progettuale

Coordinamento di progetti (principal investigator o responsabile locale)

- 2019 Fondi Ricerca di Ateneo, progetto SEED “MOREorLESS: Learning to analyse human motion with a markerless approach (15000 euro)

- 2014-2015 PAR FAS 2007/2013: Progetto *Glassense: wearable technologies for sensory supplementation*. Referente DIBRIS (63000 euro)

- Bando MIUR "Smart cities and communities and social innovation (DD n. 391/ric 5/7/2012). Progetto *SCOC, SmartCity Operation security center*. Progetto dichiarato idoneo ma non finanziato per esaurimento di fondi (3o classificato, 89 punti). Referente DIBRIS

- 2013-2014: PO CRO FESE 2007/13 Asse IV, Polo Si4Life: progetto *Kineye.* Contributo Euro 48.400 (assegno di ricerca biennale e spese di formazione)

- *2012-2016 EU FP7-SEC-2011-1: SAFEPOST Reuse and development of Security Knowledge assets for International Postal supply chains (285104)* Partecipante. Referente Scientifico UNIGE per il WP3 "Targeting screening and threat handling solutions". Contributo EU Euro 255.600 (4 anni)

- Progetto di Ricerca di Ateneo 2011: Trattamento di dati ad alta dimensionalità e feature selection. Responsabile scientifico. Euro 7500

- *2009-2010 EU FP7-SME-2007-1: VIT Vision for Innovative Transport.* Responsabile scientifico del progetto (RTD coordinator) e Responsabile UNIGE. Contributo EU Euro 216.000 (18 mesi)

- *2009-2010 Fondazione CARIGE: Riconoscersi e riconoscere: strumenti tecnologici di ausilio visivo.* Principal investigator. Contributo CARIGE Euro 100.000 (12 mesi)

- 2009-2010 MIUR-L297: Sistema INTEgrato per la Sicurezza ad Intelligenza diStribuita - SIIT. Referente DISI. Partecipazione attiva alla demo finale in presenza del valutatore ministeriale. Euro 141.000

- Progetto di ricerca di Ateneo 2008: Metodi di apprendimento statistico per l'organizzazione di dati biometrici. Euro: 6500

- *2007-2008:* Regione Liguria - PSTL *"Studio di fattibilità di un sistema di riconoscimento biometrico facciale".* Coordinatore dell'unità di ricerca UNIGE. Euro 93.000
- *2007-2008:* Regione Liguria - PSTL *"Ottimizzazione della procedura di acquisizione di Immagini Whole Body in Risonanza Magnetica"* Coordinatore dell'unità di ricerca UNIGE. Euro 60.000

Partecipazione a progetti

- 2019-2020 Progetto CARIPLO "Stairway to elderly" coordinato da R. Lanzarotti UNIMI
- Progetto SEED DIBRIS 2015 HABITAT: Human-Aware Babbler: Interactive, Talkative and Assistive Technology, Principal Investigator: Fulvio Mastrogiovanni
- Progetti Ricerca Ateneo 2010 - Shearlet per analisi di immagini e sequenze video
- 2009-2012 SLIMPORT Industria 2015 (MSE).
- *2007-2008 PRIN: 3-SHIRT*
- *2006-2010 FP6-IST-IP: Health-e-Child (027749)*
- *2006-2008: FIRB:LEarning Theory and Engineering Applications (RBIN04PARL).*
- *2002-2005 FIRB: ASTAA (Apprendimento Statistico: Teoria Algoritmi Applicazioni)*
- *2002-2005 PRA-INFM: MAIA: Medicine and Architecture Image Analysis.*
- *2002 Programma di Collaborazione Italo-Britannica (EPSRC-CRUI) "Monitoraggio automatico come mezzo per la prevenzione dei crimini).* Il progetto è nato da una mia idea e ho curato personalmente la stesura del proposal e la realizzazione del progetto.
- *2001-2004 FP6-IST: KERMIT.*
- *1998-2000 EU-CRAFT: Automatic Weighting of Fish using machine vision stage 1 (FAIR-CT97-8280)*
- *1997 EU-CRAFT: Automatic Weighting of Fish using machine vision stage 2 (FAIR-CT98-9107)*

Contratti di ricerca e accordi quadro

- 2019 Contratto di Ricerca con Ansaldo Energia spa in relazione al progetto di ricerca e innovazione MISA Light House Plant. Euro 22000
- 2019 Contratto di Ricerca con FadeOut srl per studio di fattibilità su analisi automatica di schemi ferroviari. Euro 2000.
- 2017 - Accordo quadro con Ospedale Galliera, relativo al progetto MoDiPro (Modello di Dimissione Protetta)
- 2012 Accordo Quadro con la società Imavis - consulenza nell'ambito di progetto finanziato POR-FESR(2007-2013). Responsabile Scientifico. Euro 55.000 (quota: 100%)
- 2012 Accordo Quadro con la società OnAir - consulenza nell'ambito di progetto finanziato POR-FESR(2007-2013). Responsabile Scientifico. Euro 25.000 (quota: 100%)
- 2012. Accordo Quadro con la società Imavis - consulenza sul tema " progettazione, lo sviluppo e la validazione di algoritmi di visione artificiale 3D per la videosorveglianza". Responsabile Scientifico. Euro 60.000 (quota: 100%)
- 2010-2011 Accordo Quadro con la Società Thales Alenia Space spa (Finmeccanica) - consulenza sul tema "Elaborazione Immagini per Entry Descent and Landing". Responsabile scientifico. Euro 20.000 (quota: 100%)
- 2010-2011 Accordo Quadro con la società Gigavision - consulenza nell'ambito di progetto finanziato POR-FESR(2007-2013). Responsabile scientifico. Euro 80.000 (quota: 100%)

Attività di ricerca

Organizzazione della ricerca

Dal 2019 membro fondatore di MaLGa (Machine Learning Genoa) Center http://ml.unige.it , dell'Università degli Studi di Genova. Coordino il gruppo Machine Learning and Vision, attualmente formato da 1 RTDB, 2 Post Doc, 5 dottorandi, studenti di master. Dal 2005 ad oggi ne hanno fatto parte 17 dottorandi (10 dei quali finanziati da enti o su progetti di ricerca), 9 assegnisti e 8 borsisti tutti finanziati su progetti di ricerca o contratti dei quali sono referente.

Oltre alle numerose collaborazioni con ricercatori dell'Ateneo genovese, la ricerca è stata spesso svolta in collaborazione con enti di ricerca nazionali (Istituto Italiano di Tecnologia, Università degli Studi di Verona, Università degli studi di Palermo, Istituto Nazionale di Astrofisica) o internazionali
(Marquette University, Queen Mary University of London, Dundee University, Universite Libre de Bruxelles, UCSC, MIT). Più sul versante delle applicazioni sono attive numerose collaborazioni con Aziende (PMI : Imavis srl, On Air srl, Linear srl, Aitek srl ; GI: Thales Alenia spa), Ospedali (Ospedale Galliera e Ospedale Gaslini di Genova) e Istituti (Istituto Chiossone per non vedenti). Dal 2017 partecipazione ad un proficuo programma di scambio Marquette University (Milwaukee, IL, US) finanziato da Marquette University Legacy initiative e Erasmus+.

Interessi di ricerca

Attività di ricerca svolta nei campi della Computer Vision e del Machine Learning. I principali argomenti di ricerca affrontati di recente sono l'analisi dei segnali multi-risoluzione, l'apprendimento di rappresentazioni per vari problemi di classificazione e riconoscimento in immagini e video. In alcuni casi la ricerca di base è stata stimolata da collaborazioni con enti e aziende operanti in diversi settori applicativi, tra i quali la video-sorveglianza, la robotica, l'interazione uomo-macchina, la logistica, i sistemi assistivi. Per questo motivo i metodi elencati in precedenza hanno spesso contribuito alla realizzazione di sistemi e prototipi funzionanti, talvolta oggetto di trasferimento tecnologico verso aziende operanti nei settori opportuni.

Pubblicazioni

Valutazioni VQR 2004-2010 (3 prodotti eccellenti); VQR 2011-2014 (2 prodotti eccellenti)

Dal 2002 co-autore di 36 articoli su riviste internazionali, delle quali 21 riviste in classe Q1 SCIMAGO.

Google scholar: H-index totale = 24; citazioni = 2623, delle quali 1361 dal 2016 (data 27/22/2020)
Scopus: H-index totale = 17; citazioni = 1370 (data 27/12/2020)

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- G Grossi, R Lanzarotti, P Napoletano, N Noceti, F Odone *Positive technology for elderly well-being: A review* Pattern Recognition Letters 137, 61-70 2020
- G Pasquale, C Ciliberto, F Odone, L Rosasco, L Natale "Are we done with object recognition? the icub robot's perspective" Robotics and Autonomous Systems 112, 260-281, 2019
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- A Stagliano, N. Noceti, A. Verri, F. Odone "Online space-variant background modeling with sparse coding" IEEE Transactions on Image Processing, 04/2015; 24(8). DOI:10.1109/TIP.2015.2421435
- G. Sandini, N. Noceti, A. Vignolo, A. Sciutti, F. Rea, A Verri, F Odone "Computational model of biological motion detection: a path toward view-invariant action understanding" Journal of Vision 15(2) 497, 2015
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- Alessandro Rudi, Ernesto De Vito, Francesca Odone. Geometrical and computational aspects of Spectral Support Estimation for novelty detection . PATTERN RECOGNITION LETTERS, vol. 36, p. 107-116, ISSN: 0167-8655
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- S R Fanello · U Pattacini · I Gori · V Tikhanoff · M Randazzo · A Roncone · F Odone · G Metta 3D Stereo Estimation and Fully Automated Learning of Eye-Hand Coordination in Humanoid Robots IEE-RAS International Conference on Humanoid Robots; 11/2014
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Il sottoscritto dichiara inoltre di essere informato, ai sensi e per gli effetti di cui all'art. 13 del D. Leg.vo 30.6.2003, n.196, che i dati personali raccolti sono trattati dall'Università degli Studi di Genova ai sensi dei Regolamenti in materia, di cui ai DD.R.R. nn. 198 dell'11.7.2001 e 165 del 12.4.2006.

Genova, 5 gennaio 2021

Il dichiarante - Francesca Odone _____

* N.B.: le norme indicate sono applicabili ai cittadini italiani e ai cittadini dell'Unione Europea. Per l'utilizzo delle norme stesse da parte dei cittadini non appartenenti all'Unione, regolarmente soggiornanti in Italia o autorizzati a soggiornarvi, si veda l'art. 4 del bando.

Paolo Musico short curriculum

Degree in Electronic Engineering in June 1989 from Genova University.
Worked at Marconi Italiana S.p.A. in Genova from 1st September 1989 to 31st December 1991.
Work at I.N.F.N. Genova from 7th January 1992. Responsible of Electronic Department since September 1994.

Know how:

- development of multichannel front-end, readout and trigger system for high energy physics experiments;
- knowledge of HDL languages used for FPGA and digital ASIC development;
- knowledge of high level programming languages C, C++;
- knowledge of standard buses: VME (VME64x, VXS), USB (2.0, 3.0), PCI and other lower speed communication interfaces (I^2C, SPI, 1-Wire, …);
- user and manager of electronic CAD software for electrical schematic drawing, PCB design, analog and digital simulation.

Past activities:

- Development of readout system for silicon detector of E835 experiment at Ferimilab.
- Partial development of digital ASIC for pixel detector control in the ATLAS experiment at CERN.
- Development of the trigger system for Borexino experiment at Gran Sasso laboratory. Responsible of it.
- Development of mixed signal ASIC dedicated to multianodic photomultipiers (PMT) front-end and laboratory test setup.
- Development of electronic system to handle scintillating fibers timing counter of the MEG experiment at PSI.
- Development of a prototype of front-end and High Voltage power supply for the directional optical module of the NEMO experiment.
- Development of the electronic system for a gamma camera used for both small animal SPECT and scintimammograpy.
- Development of electronic system to readout a SiPM matrix in the framework of a PET-SPECT detector for prostate multimodal imaging. The system will mainly measure the arrival timing of the detector signals with precision in the order of 300 ps. The energy of the signal will be also measured with TOT technique. The detector will sustain 10 to 100 KHz data rate.
- Responsible of the hardware design of the Central Logic Board (CLB) of the detection module for the KM3NeT detector.

Actual activities:

- Development of electronic system to readout GEM chambers at JLAB in the framework of the 12 GeV upgrade: design of the front end card housing a dedicated 128 channel ASIC and of the readout module VME64x compliant which handles 2048 channels. The whole detector will count about 50000 channels.
- Responsible of development for the front-end of DarkSide experiment veto detector.
- Responsible of development for the front-end and A/D conversion card for the BDX experiment detector.
- R&D in the framework of KM3NeT 2.0 since March 2017.
- R&D in the framework of MAECI_EIC and AHEAD2020 EU projects.
- Direct responsible of the work of all electronic technicians employed at INFN Genova.

Professional interest:

- electronic systems study dedicated to innovative detectors equipment;
- application of the High Energy Physics technologies to social sciences and biomedical applications.

I authorize to handle personal data as per Italian Dlgs 196 of 30/6/2003.
Autorizzo al trattamento dei dati personali ai sensi del Dlgs 196 del 30/6/2003.

EUROPEAN FORMAT CURRICULUM VITAE

PERSONAL INFORMATION

Name	**MINUTOLI SAVERIO**
Address	
Telephone	
Fax	-
E-mail	saverio.minutoli@ge.infn.it
Nationality	ITALIAN
Date and place of birth	
Civil status	
Children	
Military Obligations	Lieutenant of Complement, 1060 course Anti-aircraft Artillery. January 1982 – April 1983

EDUCATION

• Date (from – to)	from January 2006 to April 2009
• Name and type of organisation providing education	Universita' Degli Studi di Genova Doctoral School of Science and Technology for the Information Society
• Main subjects / professional skills	Electronic Engineering
• Qualification achieved	**PhD in ELECTRONIC, INFORMATION AND TELECOMMUNICATION ENGINEERING**
• Degree thesis title	"Engineering of the T1 detector readout for the TOTEM experiment at the LHC"
• Date	July 2009
• Name and type of organisation providing education	Istituto Nazionale Fisica Nucleare, Selective procedure, call for applications n. 13156/2009
• Main subjects / professional skills	Electronic Engineering
• Qualification achieved	**Technologist Qualification - Electronics and Computer Science**
• Date	June 2005
• Name and type of organisation providing education	Universita' Degli Studi di Genova, Department of Biomedical and Electronics Engineering (DIBE)
• Main subjects / professional skills	Electronic Engineering
• Qualification achieved	**State examination, qualification to practice the profession of ENGINEERING**
• Vote	**220 / 220**
• Date (from – to)	from September 1999 to March 2005
• Name and type of organisation providing education	Universita' Degli Studi di Genova, Department of Biomedical and Electronics Engineering (DIBE)
• Main subjects / professional skills	Electronic Engineering – microelectronics specialization
• Qualification achieved	**Master's Degree in Electronic Engineering** Five-year degree old order.
• Degree thesis title	"Design and development of the Trigger and Slow Control Interface boards for IFR BaBar experiment at SLAC"
• Vote	**110 / 110 Laude**

• Date (from – to)	from September 1976 to june 1981
• Name and type of organization providing education	State Industrial Technical Institute – Guglielmo Marconi – Messina (ME)
• Main subjects / professional skills	Electronics, electrical engineering, electronic assemblies
• Qualification achieved	**Industrial Expert Chief Technician, Electronics Specialization**

WORK EXPERIENCE

• Date (from – to)	from **01-08-2020** to **DATE**
• Name and address of employer	Istituto Nazionale Fisica Nucleare di Genova – via Dodecaneso 33, 16146, GENOVA
• Type of business or sector	Theoretical and experimental Research Institute, in the fields of subnuclear, nuclear and astroparticle physics.
• Type of application	Full Time: Research Technologist.

Improvement of the professional qualification in the management profile of INFN in the role of technologist.

The activities and tasks to which I am currently contributing are:

1. TOTEM Project Leader experiment, specifically apparatus maintenance.
2. Deputy Manager of Electronic Design Department
3. Senior designer of the LHC project data acquisition system, CT-PPS (CMS-TOTEM Precision Proton Spectrometer). This silicon detector, positioned at about 200m symmetrically to CMS, aims to improve the accuracy of trace reconstruction and the position of the interaction point in proton-proton collisions.
4. Senior designer of the acquisition system of the INFN R&D project called TIMESPOT (TIME and Space real-time Operating Tracker) for a high time resolution detector up to a few tens of picoseconds, for future high luminosity particle colliders.:
    a. 3D sensors, silicon or diamond
    b. High precision time and position measurements
    c. Low noise front-end development
    d. Track reconstruction implemented in FPGA
5. Chief Technology Officer of the LHCb Genoa experiment for detector upgrades RICH_1 and RICH_2:
    a. Responsible for production, testing and quality of Front-End circuits called Baseboard for connection and distribution of signals from multi-channel PMT detectors
    b. Responsible for production, testing and quality of the High Voltage distribution system for PMT detectors, from detector to Counting Room.
    c. R&D team designer, for new SiPM sensors for future RICH 1 and 2 detector upgrade developments.

• Date (from – to)	from **01-10-2019** to **31-07-2020**
• Name and address of employer	Istituto Nazionale Fisica Nucleare di Genova – via Dodecaneso 33, 16146, GENOVA
• Type of business or sector	Theoretical and experimental Research Institute, in the fields of subnuclear, nuclear and astroparticle physics.
• Type of application	Full Time: Technical Collaborator IV level - 2 upgrades.

At the end of the Part Time period, necessary for the launch, stabilization and structuring of the R&D division in the company (see next point below), from 01-10-2019, I'm back in charge of Full Time R&D activities in international collaborations involving the INFN section of Genoa.

The activities and tasks to which I am currently contributing are:

1. TOTEM Project Leader experiment, specifically apparatus maintenance.
2. Deputy Manager of Electronic Design Department
3. Chief Technology Officer of the LHCb Genoa experiment for detector upgrades RICH_1 and RICH_2.

• Date (from – to) from **01-09-2015** to **30-09-2019**

• Name and address of employer MECTRON SpA , Via Loreto 15A, Carasco (GE)

• Type of business or sector Company operating in the electromedical field, world leader in bone piezosurgery.

• Type of application Part Time. QUADRO liv. 8 super, Chief Technology Officer and R&D Division Manager

The activity in the company has allowed me to express and apply the knowledge, techniques and methodologies acquired in many years of basic applied research. I had the support of the company that allowed me to structure in a massive way the R&D division in all its departments, today the division has 42 people including 21 engineers (mechanical, electronic, biomedical) and a research budget + metabolism of 5M€.

I list some salient features of my activity in the company:

1. Director of R&D Division
2. R&D Division Human resources manager
3. Executive Director of Technology and New Business Strategies
4. Head of Technology Transfer, inventor of several industrial patents.
5. Operational management of 36 staff
6. Project Manager group leader.
7. Project management through Stage & Gate and GANTT process
8. Document management and certification through PDM/PLM
9. Evaluates and concludes R&D framework contracts with Universities.
10. Evaluate and conclude development contracts with third-party companies
11. Management of research budgets, timing, methods and objectives.

• Date (from – to) from **01-09-2015** to **30-09-2019**

• Name and address of employer Istituto Nazionale Fisica Nucleare di Genova – via Dodecaneso 33, 16146, GENOVA

• Type of business or sector Theoretical and experimental Research Institute, in the fields of subnuclear, nuclear and astroparticle physics.

• Type of application Part Time. Technical Collaborator IV level - 2 upgrades.

During this period of shared employment with management in a private company, I have maintained and followed all the responsibilities assigned to me:

1. Project Leader TOTEM experiment, specifically apparatus maintenance.
2. Deputy Head of Electronic Design Department
3. Contributor to the development of a silicon detector for a tracker inserted in the positions of some of the detectors of the TOTEM experiment defined Roman Pot.

• Date (from – to) from **16-07-1985** to **31-08-2015**

• Name and address of employer Istituto Nazionale Fisica Nucleare di Genova – via Dodecaneso 33, 16146, GENOVA

• Type of business or sector Theoretical and experimental Research Institute, in the fields of subnuclear, nuclear and astroparticle physics.

• Type of application Full Time. Technical Collaborator

List of main tasks and responsibilities in this working period at INFN Genoa:

• Date (from – to) from **01-07 2013** to **Date**

• Type of application **Electronics Department Deputy Manager**

• Main tasks and responsibilities Co-management of personnel (5 people)

Study, Design, Engineering, Production, Testing and Installation of electronic data acquisition systems, detector control system, detector safety system, grounding and shielding for experimental Physics equipment.

• Date (from – to)	from **01-06-2006** to **Date**
• Type of application	**Project Leader T1 telescope detector TOTEM experiment at CERN (CH).**
• Main tasks and responsibilities	Coordinator of the design, construction, production, testing and installation of gas detectors type CSC, in collaboration with the Russian Research Centre PNPI in Gatchina (St. Petersburg). Designer and Coordinator of the study, design, engineering, construction, production, testing and installation of all the Front-End and Back-End electronic systems of the T1 telescope, synthetically listed: Data acquisition system, based on custom VFAT/TOTEM chip, parallel to serial transmission on optical fiber and VME protocol Back-End cards. First level trigger system (LV1), generation and transmission of primitives on optical fiber, reconstruction of tracks in VME protocol Back-End custom boards. Distribution on fiber optic to the DAQ system of the Fast Command signals of the LHC collider. Slow Control system (T, P, H sensors) consisting of the Detector Control System and Detector Safety System. Grounding and Shielding System. All systems make constant use of programmable digital devices such as FPGAs and microprocessors. All systems are integrated and comply with the standards and protocols of the CMS experiment.
• Date (from – to)	from **01-06-2006** to **Date**
• Type of application	**Permanent member of the Technical Board of the TOTEM experiment**
• Main tasks and responsibilities	Technical coordination of the T1 telescope
• Date (from – to)	from **01-06-2006** to **Date**
• Type of application	**Member of the Collaboration Board of the TOTEM experiment**
• Main tasks and responsibilities	Technical coordination of the T1 telescope
• Date (from – to)	from **2008** to **2010**
• Name and address of the collaborating institution	INFN & Università degli Studi di Genova - Dipartimento di Fisica
• Type of application	**PRIN Project: Development of Large Micro Gas Pattern Detectors (GEM) for applications in High Energy Physics and beyond.**
• Main tasks and responsibilities	Stand-alone DAQ board development technical coordinator.
• Date (from – to)	from **01-04-2008** to **01-09-2009**
• Type of application	**Designer DAQ BoNus experiment installed at JLAB (USA)**
• Main tasks and responsibilities	Coordination and Design of the DAQ system of the cylindrical GEM detector. The DAQ system is based on the FEC and RCU boards developed at CERN for the ALICE experience. The ALICE system has been adapted to BoNus needs by increasing the Bit Rate, developing new Backplane and FEC/RCU Carriers boards, and rewriting the FPGA firmware optimizing the Event Builder dead time
• Date (from – to)	from **2008** to **Date**
• Type of application	**NEMO and KM3NET experiment designer**
• Main tasks and responsibilities	Study of a high-speed differential data transmission system on a copper twisted pair. Design of a high voltage (2kV max) and low consumption power supply for 4 quadrant photomultiplier detectors.
• Date (from – to)	from **01-09-2006** to **01-05-2007**
• Type of application	**Designer MEG experiment, installed at PSI (CH)**
• Main tasks and responsibilities	Designer of a discrete component Front-End for APD detectors. High gain FET preamplifier stage, fast discriminator and remote threshold control through Half-Duplex connection with I2C protocol.

• Date (from – to)	from **1995** to **2006**
• Type of application	**DAQ designer for BaBar experiment installed at SLAC (USA)**
• Main tasks and responsibilities	Designer and Coordinator of the study, design, engineering, construction, production, testing and installation of IFR detector electronic systems (RPC and LST detectors), briefly listed: Data acquisition system Controller Board (ICC), serial to parallel transmission on optical fiber and synchronous high-speed single ended Full-Duplex backplane. First level Trigger Board (TRG), primitive generation and tracks search. Slow Control Board (CSC) with remote control via Web-EPICS interface, for monitoring and programming of sensitive parameters for data acquisition and triggering, based on CAN-BUS protocol. 96 channels TDC card based on custom TDC32 chip developed at CERN. Pseudo-random generator card (LFSR algorithm) with 96 channels for testing the TDC card. Crate and relative controller (at CAEN) to host the Trigger and Slow Control system boards.
• Date (from – to)	from **1992** to **1995**
• Type of application	**Designer PS202 experiment, installed at CERN (CH)**
• Main tasks and responsibilities	Design of a Front-End for silicon strip detectors, based on custom ICAR chips developed at CERN. Development of an innovative rigid-flexible printed circuit board (kapton - FR4). Design of an adjustable high voltage power supply (1kV max) for silicon detectors.
• Date (from – to)	from 1988 to 1993
• Type of application	**DAQ Designer, experiment E385 installed at FERMILAB (USA)**
• Main tasks and responsibilities	Design of the data acquisition system, VME compliant, of a barrel composed of a double layer of silicon detectors. Design of a Front-End for silicon strip detectors, based on custom AMPLEX chips developed at CERN.
• Date (from – to)	from 1985 to 1988
• Type of application	**Electronic Designer, E760 experiment installed at FERMILAB (USA)**
• Main tasks and responsibilities	Design of a Limited Tube Streamer (LST) detector preamplifier stage. Design of a High Voltage (8kV) distribution and monitoring system adapted to a commercial multi-channel generator (NES).
• Date (from – to)	from **01-09-1983** to **15-07-1985**
• Name and address of employer	DEA – Digital Electronic Automation – Moncalieri (TO)
• Type of business or sector	Company operating in the Industrial Robotics and Measuring Machines sector.
• Type of application	**Technical Designer and Tester**
• Main tasks and responsibilities	Designer and Tester of digital (uP 8085 - 8088) and analog control systems for motorized handling of mechanical arms and rotors.
• Date (from – to)	from **01-05-1983** to **31-08-1983**
• Name and address of employer	SMEB – Messina (ME)
• Type of business or sector	Company operating in the electromedical sector
• Type of application	**Technical Designer and Tester**
• Main tasks and responsibilities	Design, assembly and testing of electro-medical equipment such as electro-stimulators and ultrasound therapy.

TEACHING ACTIVITIES

• Date (from – to)	Academic year 2014 / 2015
• Name and address of the collaborating institution	Universita' degli Studi di Genova - Dipartimento di Fisica – via Dodecaneso 33, 16146, GENOVA
• Type of application	**Lecturer course " Electronics and data acquisition ", students 1st year PhD in Physics, cycle XXX.**

• Date (from – to)	Academic year 2013 / 2014
• Name and address of the collaborating institution	Universita' degli Studi di Genova - Dipartimento di Fisica – via Dodecaneso 33, 16146, GENOVA
• Type of application	**Lecturer course " Electronics and data acquisition ", students 1st year PhD in Physics, cycle XXIX.**

REVIEWER ACTIVITIES

• Date (from – to)	May 2020
• Name and address of the collaborating institution	Km3Net experiment steering committee
• Type of application	**Product Readiness Review for the "*KM3NeT Calibration Units*"**
• Date (from – to)	October 2014
• Name and address of the collaborating institution	LHCb experiment steering committee
• Type of application	**Engineering Design Review for the "*Elementary Cell of the RICH photodetector*"**

SCIENTIFIC AFFILIATION

• Date (from – to)	from **01-01 2013** to **31-03- 2013**
• Name and address of the collaborating institution	European Organization for Nuclear Research (CERN - Geneva)
• Type of application	**Associated Member of the Personnel (Scientific Associate)**
• Main tasks and responsibilities	Shift Leader, Detector Expert Leader of the T1 telescope of the TOTEM experiment
• Date (from – to)	from **01-0702012** to **31-122012**
• Name and address of the collaborating institution	European Organization for Nuclear Research (CERN - Geneva)
• Type of application	**Associated Member of the Personnel (Paid Associate)**
• Main tasks and responsibilities	Shift Leader, Detector Expert Leader of the T1 telescope of the TOTEM experiment

PATENTS

▪ IT201800005561A1; WO2019224693A1	"Method for teeth cleaning by means of a composition in the form of powder based on Hydroxyapatite"
▪ IT102019000014556	"Assieme inserto con identificatore a radiofrequenza per dispositivo medicale".
▪ IT102019000014559	"Assieme inserto con identificatore a radiofrequenza".
▪ IT102019000014565	"Assieme manipolo per dispositivo medicale"

SCIENTIFIC PAPERS

▪ List available	Co-author of about 100 publications in international journals

TRAINING

• Date	December 2020
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Corso di Formazione Rischio Criogenia”
• Date	October - December 2020
• Organization providing training	Mentor Graphics
• Main subjects / professional skills	**Training Course** “Xpedition Flow Schematic + Layout”
• Date	Maggio 2020
• Organization providing training	Accademia Eraclitea
• Main subjects / professional skills	**Training Course** “Formazione per Rischio laser”
• Date	Maggio 2020
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Corso di WORD - I livello”
• Date	April 2020
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Corso di EXCEL - BASE”
• Date	April 2020
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Corso introduttivo Mentor Expedition”
• Date	April 2020
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Sicurezza informatica - BASE”
• Date	October 2019
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Gestione del personale disabile”
• Date	May 2017
• Organization providing training	RINA Academy
• Main subjects / professional skills	**Training Course** “Project Management: strumenti”
• Date	May 2017
• Organization providing training	RINA Academy
• Main subjects / professional skills	**Training Course** “Project Management: gestione economica”
• Date	September 2018
• Organization providing training	PLASTICS Academy
• Main subjects / professional skills	**Training Course** “Progettazione manufatti in materie plastiche”
• Date	May 2014
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Designing with ALTERA SoC”
• Date	November 2013
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Data Driven FEE for time and energy measurement”
• Date	April 2013
• Organization providing training	ALTERA

• Main subjects / professional skills	**Training Course** “VEC 104, Altera NIOS II Processor”
• Date	June 2012
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “New-PWA Tools for next generation experiments”
• Date	October 2010
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Progettazione Digitale VLSI”
• Date	April 2010
• Organization providing training	ALTERA
• Main subjects / professional skills	**Training Course** “Altera Quartus II Timing Analysis”
• Date	December 2009
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Tecniche innovative di rivelazione particelle”
• Date	October 2007
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Integrità dei segnali nelle moderne schede elettroniche”
• Date	September 2006
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Qualità e Progettazione di sistema per esperimenti Fisica nello spazio”
• Date	May 2006
• Organization providing training	Istituto Italiano della Saldatura
• Main subjects / professional skills	**Training Course** “Saldatura in elettronica, leghe senza piombo”
• Date	April 2006
• Organization providing training	ESPERAN - CADENCE
• Main subjects / professional skills	**Training Course** “C++ & System C”
• Date	November 2005
• Organization providing training	Istituto Nazionale Fisica Nucleare
• Main subjects / professional skills	**Training Course** “Introduzione al Bus industriale VME”
• Date	June 1999
• Organization providing training	CADENCE
• Main subjects / professional skills	**Training Course** “Concept HDL Front to Back”

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE	**ITALIAN**
OTHER LANGUAGE	
	ENGLISH
• Reading skills	EXCELLENT
• Writing skills	EXCELLENT
• Oral expression skills	EXCELLENT
	FRENCH
• Reading skills	INTERMEDIATE
• Writing skills	BASIC
• Oral expression skills	INTERMEDIATE

INTERPERSONAL SKILLS AND COMPETENCES

EXCELLENT INTERPERSONAL AND INTEGRATION SKILLS WITH WORKING GROUPS IN ORDER TO ACHIEVE AN OBJECTIVE. THE LONG PERIOD OF WORK IN MULTINATIONAL COMPANIES AND SCIENTIFIC RESEARCH, ITS CHARACTERISTIC MULTI-ETHNICITY AND DIVERSITY OF IDEAS AND OPINIONS, HAS STRONGLY CONTRIBUTED TO THIS ASPECT. THE COLLABORATION, COORDINATION, POSITION-TAKING AND CRITICAL ASPECT OF EACH CHOICE HAS CONTRIBUTED TO THE DEVELOPMENT OF AN EXCELLENT RELATIONAL ABILITY AND COMPETENCE.

ORGANIZATIONAL SKILLS AND COMPETENCES

EXCELLENT SKILLS OF ANALYSIS AND SYNTHESIS OF A PROJECT, WHICH CONTRIBUTE TO A CLEAR VISION OF THE CRITICAL POINTS AND ALLOW TO ASSIGN SPECIFIC ROLES AND SKILLS TO THE NEED. A LOT OF ATTENTION, ESPECIALLY IN THE INITIAL PHASES OF COORDINATION AND ADMINISTRATION OF A PROJECT, IS DEDICATED TO THE EVALUATION OF COSTS, AND TO LEARNING AND PREPARATION TIMES IN LINE WITH THE PERSONAL CHARACTERISTICS AND NEEDS OF THE COLLABORATORS.
EXCELLENT ORGANIZER OF EMPLOYEE WORK, TEAM BUILDING, PROJECT BREAKDOWN, GANTT AND WORK PROGRESS.
EXCELLENT PROBLEM-SOLVING SKILLS.

TECHNICAL SKILLS AND COMPETENCES

SECTOR:

FAST PROGRAMMABLE ANALOGUE AND DIGITAL DATA ACQUISITION SYSTEMS.
PROGRAMMABLE CONTROL AND MONITORING SYSTEMS FOR LOW SPEED SENSORS.
PROGRAMMABLE EMBEDDED AND SOC.
DIGITAL OPTICAL TRANSMISSION SYSTEMS.
DIGITAL IMAGE RECOGNITION AND FILTERING SYSTEMS.
MEDICAL EQUIPMENT FOR DENTAL SURGERY, DENTAL PROPHYLAXIS, ENT, MAXILLOFACIAL, SKULL, SPINE.

TECHNICAL CAPABILITIES:

COORDINATION OF THE INSTALLATION OF AN EXPERIMENTAL APPARATUS.
ORGANIZATION AND MANAGEMENT OF THE DEVELOPMENT AND TEST LABORATORY FOR HARDWARE PROJECTS.
COORDINATION OF SOFTWARE AND FIRMWARE DEVELOPMENT ACTIVITIES.
SIZING AND EVALUATION OF THE DESIGN PROBLEMS OF AN ELECTRONIC SYSTEM.
SIZING AND EVALUATION OF DESIGN PROBLEMS OF A MECHATRONIC SYSTEM.
PRECISION MECHANICS, PNEUMATICS AND HYDRAULICS.
PLASTIC AND METAL MOLDING.
METAL SINTERING TECHNIQUES, DML/SLM TECHNOLOGIES, TITAMIUN TI6AI4V, STAINLESS STEEL AISI 316L.

TECHNICAL SKILLS:

DESIGN AND PROGRAMMING OF ELECTRONIC DEVICES: FPGA, DSP, UC, UP;
DESIGN AND PROGRAMMING SW-FW: C, C++;ASM, VHDL, VERILOG.
SERIAL COMMUNICATION PROTOCOLS: RS232, RS485, RS422, I2C, SPI, UART, ONEWIRE, CAN-BUS, MODBUS, USB;
INDUSTRIAL DATA ACQUISITION PROTOCOLS: VME32, VME64, VME64X, MODBUS;
BASIC KNOWLEDGE OF PROTOCOLS: IP, ZIGBEE, BLUETOOTH;
INDUSTRIAL CONTROL ALGORITHMS: PWM, PID;
DIGITAL IMAGE FILTERING ALGORITHMS: SOBEL – CANNY.
KNOWLEDGE OF ULTRASONIC POWER SYSTEMS.
KNOWLEDGE 2D/3D MECHANICAL DESIGN, FEM MODELLING.

CAE/CAD DEVELOPMENT TOOLS USED:

ALTERA: QUARTUS II ANALYSIS AND SYNTHESIS OF HDL DESIGNS.
XILINX: ISE HDL DESIGN SUITE, EDK PLATFORM STUDIO.
CYPRESS: WARP HDL DESIGN.
ISYSTEM: WINIDEA UCONTROLLER IDE AND DEBUGGER ENVIRONMENT.
CADENCE: ORCAD SCHEMATIC ENTRY, LAYOUT.
ALTIUM DESIGNER.
CADENCE: PSPICE EDITOR AND AD SIMULATOR.
CADENCE: HDL, CONCEPT, ALLEGRO PCB DESIGN.
SYNOPSYS: DESIGN IC COMPILER
MENTOR GRAPHICS: FPGA ADVANTAGE, XPEDITION, HDL DESIGN, HYPERLYNX, SIGNAL INTEGRITY DESIGN SIMULATION AND ANALYSIS, MODELSIM.
MIKROELEKTRONIKA: PIC32 EDK, DSPIC EDK.

COMPUTER AND MANAGEMENT SKILLS:

GOOD KNOWLEDGE OF OPERATING SYSTEMS: LINUX, UNIX, WINDOWS NT/2000/XP/7
GOOD KNOWLEDGE OF PROGRAMMING LANGUAGES: C, C++, VHDL, VERILOG, ASSEMBLER INTEL 80CXX E MOTOROLA 68HCXX.
GOOD KNOWLEDGE OF DEVELOPMENT ENVIRONMENTS: MICROSOFT VISUAL STUDIO E VISUALBASIC, LABVIEW, MATLAB.
GOOD KNOWLEDGE OF MICROSOFTS'S OFFICE PACKAGE: WORD, EXCEL, POWERPOINT, ACCESS, OUTLOOK, PROJECT.
BASIC KNOWLEDGE OF: AUTOCAD INVENTOR, SOLIDWORKS, COMSOL MULTIPHYSICS, HTML, PYTON, ROOT.
MES (MANUFACTURING EXECUTION SYSTEM): IT SOLUTION BUILT AROUND THE FACTORY THAT COVERS ALL PRODUCTION NEEDS.
MICROSOFT DYNAMICS® NAV: MODULAR ERP (EENTERPRISE RESOURCE PLANNING) MANAGEMENT SOLUTION, INTEGRATES THE AUTOMATION OF BUSINESS PROCESSES.
TEAMGANTT: ONLINE PROJECTS SCHEDULE SOFTWARE.
STAGE&GATE: INDUSTRY STANDARD FOR THE MANAGEMENT OF INNOVATIVE PRODUCT PROCESSES.

LICENSE OR LICENSES

Car, type B license

FURTHER INFORMATION

For further information regarding training and/or work experience please contact me at the e-mail or telephone numbers indicated at the beginning of this document.

I hereby authorize the processing of my personal data in accordance with art.13 of Legislative Decree 196/2003 and art.13 of EU Regulation 2016/679.

Genoa, January 2021

SAVERIO MINUTOLI

Saverio Minutoli

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