

CURRICULUM VITAE of Dario Corona

8 August 2019

EDUCATION AND TRAINING

- 2019 **PhD in Mathematics and Applications**, University of Camerino
Field of Research: Control Systems
Thesis: “Decomposition of Optimal Tracking Controllers for Weakly Dual Redundant Systems”
Advisors: prof. Maria Letizia Corradini and prof. Roberto Giambò
- 2018 **Conseguimento di 24 CFU** nelle “discipline antropo psico pedagogiche e nelle metodologie e tecnologie didattiche”. Requisito d’accesso al concorso per l’ammissione ai FIT, istituito ai sensi del Decreto ministeriale 616 del 10/08/2017
- 2018 **Research Stay in Slovak University of Technology, Bratislava**
from February to April, I worked with the team of Prof. Ing. Michal Kvasnica to study the applications of my research in Model Predictive Control domain.
- 2015 **Master Degree in Mathematics and Applications**, University of Camerino
Final Grade: full marks (110/110) and *summa cum laude*
Thesis: “A Mathematical Model for the Development of a Lower Extremity Exoskeleton”
Advisors: prof. Fabio Giannoni and prof. Maria Letizia Corradini
- 2014 **Research scholarship**
Project: “Development of a lower limb exoskeleton for disabled people”
founded by *MES S.p.a.* and the University of Camerino
- 2012 **Bachelor Degree in Mathematics and Applications**, University of Camerino
Final Grade: full marks (110/110) and *summa cum laude*
Thesis: “GARCH Model and Volatility Analysis in Finance”
Advisor: prof. Carlo Lucheroni
- 2012 **University Stage**
“Analisi ed Elaborazione 3D” at “*Halley Informatica*” company
- 2009 **Indam** (Istituto Nazionale di Alta Matematica) **scholarship**
- 2009 **High School**, Scientific Lyceum, Liceo Costanza Varano Camerino
Final Grade: 100/100

TEACHING EXPERIENCE

- 2018/19 Appointed Professor of System Analysis and Control Theory, Unicam, Master Course in Mathematics and Applications, 42h, 6 CFU.
- 2018/19 Exercise Lectures of Mathematical Methods for Physics, Unicam, Bachelor Course in Physics, 25h
- 2018/19 Exercise Lectures of Analysis 2, Unicam, Bachelor Course in Physics, 25h
- 2017/18 Exercise Lectures of Analysis 2, Unicam, Bachelor Course in Physics, 25h
- 2016/17 Programming Class, Unicam, Bachelor Course in Mathematics and Applications, 30h
- 2016/17 Exercise Lectures of Analysis 2, Unicam, Bachelor course in Mathematics and Applications, 25h
- 2016/17 Exercise Lectures of Analysis 1, Unicam, Bachelor course in Mathematics and Applications, 25h

PUBLICATIONS

- 2019 Dario Corona, Andrea Cristofaro. *Optimally controlled steady-states for multi-input underactuated systems*. In European Control Conference 2019, Naples.
- 2019 Francesco Pezzuoli, Dario Corona, Maria Letizia Corradini. *Improvements in a Wearable Device for Sign Language Translation*. In Applied Human Factors and Ergonomics 2019, Washington D.C.
- 2019 Dario Corona, Andrea Cristofaro, and Damiano Rotondo. *Reachability and stabilization of scheduled steady-states for LPV single-input systems*. In Journal of the Franklin Institute, Volume 356, Issue 8, May 2019, Pages 4478-4495.
- 2018 Dario Corona, Andrea Cristofaro. *Optimal Closed-Loop Tracking Controllers for Weakly Dual Redundant Plants with Quasiperiodic References*. In Conference on Decision and Control 2018, Miami
- 2018 Dario Corona, Andrea Cristofaro. *Optimality Principles and Decomposition of Tracking Controllers for Weakly Dual Redundant Systems*. In Optimal Control Applications and Methods, Volume 39, Issue 4, July/August 2018, Pages 1451-1466.
- 2017 Francesco Pezzuoli, Dario Corona, Andrea Cristofaro, Maria Letizia Corradini *Development of a Wearable Device for Sign Language Translation*. In Human Friendly Robotics 2017, Napoli, November 2017
- 2017 Dario Corona, Andrea Cristofaro, and Damiano Rotondo. *Optimizing output regulation for a class of underactuated LPV systems*. In Mediterranean Control Conference, pages 135–140, July 2017.
- 2017 Dario Corona, Andrea Cristofaro, and Maria Letizia Corradini. *Optimal Output Regulation for Underactuated Systems with Quasiperiodic References*. IFAC World Congress 2017, pages 3717–3722.
- 2016 Dario Corona and Andrea Cristofaro. *Some remarks on optimal output regulation for weakly dual redundant plants*. In Mediterranean Control Conference, pages 1205-1211, June 2016.

WORK EXPERIENCE

- Feb-June* **External Expert and Tutor**
2019 For the PON/FSE project “10.6.6 A-FSEPON-LA-2017-27”
Title “IPSIA: Immaginare per creare” - Module “Talking Hands: i segni prendono voce” - 108h
I.S.I.S.S. Magarotto, Rome
- from 2015 **Project Leader**
Talking Hands: a wearable device for gesture recognition for Augmentative and Alternative Communication (Limix Srl)
- from 2015 **Founding Partner and CEO of “LiMiX Srl”**,
Innovative Start-up and Spin-off of the University of Camerino (Italy)
- 2015 **Project Leader**
Creation and implementation of a 3D mounting and maintenance manual for electric cars
University of Camerino and “Belumbury Spa”
- 2012/13 **Post Graduation Stage**
in Logistic Department of “Colussi Group” company

THIRD MISSION

Through the spin-off Limix, I am translating the academic research into products with high social impact. The main project is Talking Hands, a wearable device for gesture recognition which aims to help people with severe speech or language problems.

Awards:

2019	Seal of Excellence (SME Instrument Phase 2): Certificate delivered by the European Commission which states that Talking Hands was scored as a high-quality project proposal in a highly competitive evaluation process.
2018	SME Instrument Phase 1: EU Commission funds for feasibility study (project manager)
2018	finalist of Chivas Venture , international competition for start-up with high social impact
2017	POR MARCHE FESR 2014 2020 “Sostegno allo Sviluppo ed al Consolidamento di Start-Up ad alta Intensità di Applicazione di Conoscenza”
2016	R.O.M.E. Prize , 100.000\$ for the European maker project with highest social impact
2016	E-Capital , regional Business plan competition
2015	StartCup Marche , regional Business plan competition

Main public presentations:

2019	Forum PA (Italian National Forum of Public Administration), invited by Undersecretary for Family and Disability Vincenzo Zoccano, Rome
2018	Makers Town , showcasing the Town of the Future and what needs to be done in terms of policy, private investment and education, Bruxelles
2018	SUCCEED , Stimulate financial education to foster entrepreneurship and Development, Bruxelles
2018	Netval , Italian association for the valorisation of results from public research, Unicam
2017	Global Teacher Prize , invited by MIUR, Dubai
2016	Mind the Bridge , start-up incubator ,San Francisco

COMPUTER SKILLS

I have great attitude and experience working on information technology

Operative Systems	Windows 7/10 - Linux (Ubuntu, Debian) good practical knowledge, obtained by personal and professional experience
Microsoft Office	Excellent knowledge of Excel, Word, Access, Power Point and VBA language
Programming	MATLAB, Python, C and C++

LANGUAGES

Italian	Mother tongue
English	Cambridge First Certification (<i>B2</i>)
German	Limited knowledge (non-certificated level: <i>A1</i>)

PROFESSIONAL SKILLS

Excellent attitude to problem solving	Excellent analytical skills
Flexibility and adaptability	Good communication skills
Diligent and responsible	