E U R O P E A N C U R R I C U L U M V I T A E F O R M A T

PERSONAL INFORMATION

Surname and Name	**COSTANTE GABRIELE**
Email	gabriele.costante@gmail.com, gabriele.costante@unipg.it
Nationality	ITALIAN
Date of Birth	18/01/1988
Personal Web page	HTTPS://WWW.UNIPG.IT/PERSONALE/GABRIELE.COSTANTE
Scopus Profile	HTTPS://WWW.SCOPUS.COM/AUTHID/DETAIL.URI?AUTHORID=55555456700
Google Scholar Profile	HTTPS://SCHOLAR.GOOGLE.IT/CITATIONS?USER=UXCE_OEAAAAJ&HL=IT

EDUCATION AND TRAINING

• Dates (from – to)	November 2012 – February 2016
Date of qualification	12/02/2016
• Name and type of organization providing education and training	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
• Principal subjects/occupational skills covered	Ph.D in Information Engineering Research activities and studies on Machine Learning and Computer Vision approaches for Robotic applications.
• Title of qualification awarded	**Ph.D in Information Engineering** Title of the thesis: "Perception for Robot Navigation: from Visual Learning to Active Vision"
• Dates (from – to)	November 2015
• Name and type of organization providing education and training	University of Perugia, Perugia (PG), Italy
• Title of qualification awarded	**Professional certification** – Information Engineering
• Dates (from – to)	November 2010 – 18 July 2012
Date of qualification	18/07/2012
• Name and type of organization providing education and training	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
• Principal subjects/occupational skills covered	Automation, Computer Engineering, Robotics, Telecommunications
• Title of qualification awarded	**MSc in Information and Automation Engineering** with vote 110/110 cum laude Title of the thesis: "Online Learning Techniques for Semantic Robot Localization"
• Dates (from – to)	October 2007 – 4 November 2010
Date of qualification	04/11/2010

• Name and type of organization providing education and training	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
• Principal subjects/occupational skills covered	Electronic and Computer Engineering, Control Engineering
• Title of qualification awarded	**BSc in Information and Electronic Engineering** with vote 110/110 cum laude Title of the thesis: "Development and Implementation of algorithms for EKF-based SLAM"
• Dates (from – to)	September 2002 – July 2007
• Name and type of organization providing education and training	Liceo Scientifico Galeazzo Alessi, Perugia (PG), Italy
• Title of qualification awarded	**High School Diploma** with vote 100/100

CURRENT EMPLOYMENT

• Dates (from - to)	29/11/2022 – present
• Name and address of the employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
• Type of company or sector	Research and Education
• Occupation or position held	**Associate Professor – full-time (art. 24 c.3-b L.240/10)**
• Main activities and responsibilities	Research activity on Robotics, Machine Learning, Computer Vision and Control Theory - Teaching activities - Management of thesis and internship activities - Management of research projects with companies on the topics of Robotics, Machine Learning, Computer Vision and Control Theory

WORK EXPERIENCE

• Dates (from – to)	29/11/2019 – 28/11/2022
• Name and address of the employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
• Type of company or sector	Research and Education
• Occupation or position held	**Researcher (RTD-B) – full-time (art. 24 c.3-b L.240/10)**
• Main activities and responsibilities	Research activity on Robotics, Machine Learning, Computer Vision and Control Theory - Teaching activities - Management of thesis and internship activities - Management of research projects with companies on the topics of Robotics, Machine Learning, Computer Vision and Control Theory
Dates (from – to)	01/01/2019 – 28/11/2019
Name and address of the employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Type of company or sector	Research and Education
Occupation or position held	**Research Fellow** art. 22 of law 30 December 2010, n.240 in the project entitled: *"Machine learning tools applied to robotics and automation"*
Main tasks and responsibilities	Research activity on Robotics, Machine Learning, Computer Vision and Control Theory - Management of thesis and internship activities - Management of research projects with companies on the topics of Robotics, Machine Learning, Computer Vision and Control Theory
Dates (from – to)	15/12/2015 – 14/12/2018

Name and address of the employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Type of company or sector	Research and Development
Occupation or position held	**Research Fellow** art. 22 of law 30 December 2010, n.240 in the project entitled: *"Development of technologies for knowledge transfer and adaptation between intelligent systems for home automation applications"*
Main tasks and responsibilities	Research activity on Robotics, Machine Learning, Computer Vision and Control Theory - Management of thesis and internship activities - Management of research projects with companies on the topics of Robotics, Machine Learning, Computer Vision and Control Theory

Dates (from – to)	01/04/2014 – 30/04/2015
Name and address of the employer	Robotics and Perception Group, University of Zurich, Zurich, Switzerland
Type of company or sector	Research and Development
Occupation or position held	**Visiting Researcher (Research Internship)**
Main tasks and responsibilities	Research activity on navigation based on Computer Vision algorithms for aerial drones

EDITORIAL BOARDS

Period	February 2020 - present
Role	**Associate Editor** for the journal
Website	https://www.ieee-ras.org/publications/ra-l/ra-letters-editorial-board
Journal	IEEE Robotics and Automation Letters (IEEE RA-L)

SCIENTIFIC COMMITTEES

Period	December 2021 - present
Role	**Chair** of the Working Group on Artificial Vision
Website	https://i-rim.it/it
Association	Italian Institute of Robotics and Intelligent Machines (I-RIM)

Period	From September 2023 - present
Role	**Conference Associate Editor – Visual Perception and Learning**
Website	https://2024.ieee-icra.org/
Conference	25th IEEE International Conference on Robotics and Automation (ICRA 2024)

Period	From February 2023 September 2020
Role	**Conference Associate Editor**
Website	https://www.micc.unifi.it/icpr2020/
Conference	25th International Conference on Pattern Recognition (ICPR) 2020

SEMINARS BY INVITATION, WORKSHOP AND PARTICIPATION IN CONFERENCES AS CHAIR

Date	07/10/2021
Workshop title	**Organizer of the Workshop** "Artificial Perception in Agriculture: from current state of the art in research and industry to the next frontiers"

Event	Italian Conference of Robotics and Intelligent Machines (I-RIM 3D) / Open School "Copernicus, Agriculture 4.0 and environmental and business sustainability"
Date	05/11/2023
Seminar title	"Autonomous Mobile Robots for Crop Monitoring"
Event	IEEE international Workshop on Metrology for Agriculture and Forestry
Date	12/07/2022 and 23/06/2023
Seminar title	"Deep Reinforcement Learning: fundamentals and applications to mobile robotics"
Context	National Ph.D. on Artificial Intelligence
Date	25/05/2021
Seminar title	"Robotics and Artificial Intelligence for Precision Agriculture"
Event	Open School "Copernicus, Agriculture 4.0 and environmental and business sustainability"
Date	06/10/2020
Seminar title	"Machine Learning"
Place	Umbria Digital Innovation Hub
Date	10/02/2020
Seminar title	"Introduction to Machine Learning and Data Analysis"
Place	Department of Chemistry of the University of Turin
Activity	Session Chair (by invitation) - Session Title "Mobile Robots"
Conference	20th International Conference on Advanced Robotics (ICAR) 2021 (virtual edition)

SCIENTIFIC PUBLICATIONS

BOOK CHAPTERS (1):

1. "EXPLOITING PHOTOMETRIC INFORMATION FOR PLANNING UNDER UNCERTAINTY", COSTANTE G., DELMERICO J., WERLBERGER M., VALIGI P., SCARAMUZZA D., ROBOTICS RESEARCH, SPRINGER, CHAM, 2018. 107-124.

ARTICLES IN INTERNATIONAL JOURNALS (32):

1. "DATA-DRIVEN AND UNCERTAINTY-AWARE ROBUST AIRSTRIP SURFACE ESTIMATION", CROCETTI, F.; FRAVOLINI, M.L.; COSTANTE, G.; VALIGI, P.; NEURAL COMPUTING AND APPLICATIONS, 2023.
2. "DEVELOPMENT AND ANALYSIS OF A UWB RELATIVE LOCALIZATION SYSTEM", BRUNACCI, V.; DE ANGELIS, A.; COSTANTE, G.; CARBONE, P.; IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, 2023.
3. "FORECASTING CONSUMER CONFIDENCE THROUGH SEMANTIC NETWORK ANALYSIS OF ONLINE NEWS", FRONZETTI, COLLADON, A.; GRIPPA, F.; GUARDABASCIO, B.; COSTANTE, G.; RAVAZZOLO, F.; SCIENTIFIC REPORTS, 2023.
4. "A CONVEX PROGRAMMING APPROACH TO MULTIPOINT OPTIMAL MOTION PLANNING FOR UNICYCLE ROBOTS", LEOMANNI, M.; MOLLICA, G.; DIONIGI, A.; VALIGI, P.; COSTANTE, G.; IEEE CONTROL SYSTEMS LETTERS, 2023.
5. "ARD-VO: AGRICULTURAL ROBOT DATA SET OF VINEYARDS AND OLIVE GROVES", CROCETTI, F.; BELLOCCHIO, E.; DIONIGI, A.; FELICIONI, S.; COSTANTE, G.; FRAVOLINI, M.L.; VALIGI, P.; JOURNAL OF FIELD ROBOTICS, 2023.

6. "INTEGRATING SPARSE LEARNING-BASED FEATURE DETECTORS INTO SIMULTANEOUS LOCALIZATION AND MAPPING—A BENCHMARK STUDY", MOLLICA, G.; LEGITTIMO, M.; DIONIGI, A.; COSTANTE, G.; VALIGI, P.; SENSORS, 2023.

7. "A BENCHMARK ANALYSIS OF DATA-DRIVEN AND GEOMETRIC APPROACHES FOR ROBOT EGO-MOTION ESTIMATION", LEGITTIMO, M.; FELICIONI, S.; BAGNI, F.; TAGLIAVINI, A.; DIONIGI, A.; GATTI, F.; VERUCCHI, M.; COSTANTE, G.; BERTOGNA, M.; JOURNAL OF FIELD ROBOTICS, 2023.

8. "ROBUST MULTIPLE FAULT ISOLATION BASED ON PARTIAL-ORTHOGONALITY CRITERIA", CARTOCCI, N.; CROCETTI, F.; COSTANTE, G.; VALIGI, P.; FRAVOLINI, M.L.; INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, 2022.

9. "AIRCRAFT ROBUST DATA-DRIVEN MULTIPLE SENSOR FAULT DIAGNOSIS BASED ON OPTIMALITY CRITERIA", CARTOCCI, N.; NAPOLITANO, M. R.; CROCETTI, F.; COSTANTE, G.; VALIGI, P.; FRAVOLINI, M.L.; MECHANICAL SYSTEMS AND SIGNAL PROCESSING, 2022.

10. "DATA-DRIVEN FAULT DIAGNOSIS TECHNIQUES: NON-LINEAR DIRECTIONAL RESIDUAL VS. MACHINE-LEARNING-BASED METHODS", CARTOCCI, N.; NAPOLITANO, M. R.; CROCETTI, F.; COSTANTE, G.; VALIGI, P.; FRAVOLINI, M.L. SENSORS, 2022.

11. "A NOVEL VISION-BASED WEAKLY SUPERVISED FRAMEWORK FOR AUTONOMOUS YIELD ESTIMATION IN AGRICULTURAL APPLICATIONS", BELLOCCHIO, E.; CROCETTI, F.; COSTANTE, G.; FRAVOLINI, M.L.; VALIGI, P.; ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, 2022.

12. "TIME-OPTIMAL CONTROL OF A MULTIDIMENSIONAL INTEGRATOR CHAIN WITH APPLICATIONS", LEOMANNI, M.; COSTANTE, G.; FERRANTE, F.; IEEE CONTROL SYSTEMS LETTERS, 2022.

13. "AUTONOMOUS SINGLE-IMAGE DRONE EXPLORATION WITH DEEP REINFORCEMENT LEARNING AND MIXED REALITY", DEVO, A.; MAO, J.; COSTANTE, G.; LOIANNO, G.; IEEE ROBOTICS AND AUTOMATION LETTERS, 2022.

14. "E-VAT: AN ASYMMETRIC END-TO-END APPROACH TO VISUAL ACTIVE EXPLORATION AND TRACKING", DIONIGI, A.; DEVO, A.; GUIDUCCI, L.; COSTANTE, G., IEEE ROBOTICS AND AUTOMATION LETTERS, 2022.

15. "ENHANCING CONTINUOUS CONTROL OF MOBILE ROBOTS FOR END-TO-END VISUAL ACTIVE TRACKING", DEVO, A.; DIONIGI, A.; COSTANTE, G., ROBOTICS AND AUTONOMOUS SYSTEMS, 2021.

16. "A COMPREHENSIVE CASE STUDY OF DATA-DRIVEN METHODS FOR ROBUST AIRCRAFT SENSOR FAULT ISOLATION", CARTOCCI, N.; NAPOLITANO, M. R.; COSTANTE, G.; FRAVOLINI, M. L., SENSORS, 2021.

17. "DATA-BASED DESIGN OF ROBUST FAULT DETECTION AND ISOLATION RESIDUALS VIA LASSO OPTIMIZATION AND BAYESIAN FILTERING", CASCIANELLI, S.; COSTANTE, G.; CROCETTI, F; RICCI, E.; VALIGI, P.; FRAVOLINI, M. L., ASIAN JOURNAL OF CONTROL, 2021.

18. "UNCERTAINTY ESTIMATION FOR DATA-DRIVEN VISUAL ODOMETRY", COSTANTE, G.; MANCINI, M., IEEE TRANSACTIONS ON ROBOTICS, 2020.

19. "TOWARDS GENERALIZATION IN TARGET-DRIVEN VISUAL NAVIGATION BY USING DEEP REINFORCEMENT LEARNING", DEVO, A.; MEZZETTI, G.; COSTANTE, G.; FRAVOLINI, M. L.; VALIGI, P. , IEEE TRANSACTIONS ON ROBOTICS, 2020.

20. "INTERVAL PREDICTION MODELS FOR DATA-DRIVEN DESIGN OF AERIAL VEHICLE'S ROBUST ADAPTIVE CONTROLLERS", FRAVOLINI, M. L.; COSTANTE, G.; YUCELEN, T.; NAPOLITANO, M. R., JOURNAL OF GUIDANCE, CONTROL, AND DYNAMICS, 2020.

21. "COMBINING DOMAIN ADAPTATION AND SPATIAL CONSISTENCY FOR UNSEEN FRUITS COUNTING: A QUASI-UNSUPERVISED APPROACH"., BELLOCCHIO, E.; COSTANTE, G.; CASCIANELLI, S.; FRAVOLINI, M. L.; VALIGI, P., IEEE ROBOTICS AND AUTOMATION LETTERS, 2020.

22. "DEEP REINFORCEMENT LEARNING FOR INSTRUCTION FOLLOWING VISUAL NAVIGATION IN 3D MAZE-LIKE ENVIRONMENTS", DEVO, A.; COSTANTE, G.; VALIGI, P. , IEEE ROBOTICS AND AUTOMATION LETTERS, 2020

23. "Weakly Supervised Fruit Counting for Yield Estimation Using Spatial Consistency", Enrico Bellocchio E., Ciarfuglia T. A., Costante G., Valigi P., IEEE Robotics and Automation Letters, 2019

24. "The Role of the Input in Natural Language Video Description", Cascianelli S., Costante G., Devo A., Ciarfuglia T. A., Valigi P., Fravolini M. L., IEEE Transactions on Multimedia, 2019

25. "Ls-vo: Learning dense optical subspace for robust visual odometry estimation", Costante G., Ciarfuglia T. A., IEEE Robotics and Automation Letters, 2018.

26. "J-MOD2: Joint Monocular Obstacle Detection and Depth Estimation", Mancini M., Costante G., Valigi P., Ciarfuglia T. A., IEEE Robotics and Automation Letters, 2018.

27. "Full-GRU Natural Language Video Description for Service Robotics Applications", Cascianelli S., Costante G., Ciarfuglia T. A., Valigi P., Fravolini M. L., IEEE Robotics and Automation Letters, 2018.

28. "Towards Domain Independence for Learning-Based Monocular Depth Estimation", Mancini, M.; Costante, G.; Valigi, P.; Ciarfuglia, T.A.; Delmerico, J; Scaramuzza, D., IEEE Robotics and Automation Letters, 2017.

29. "Robust visual semi-semantic loop closure detection by a covisibility graph and CNN features", Cascianelli, S.; Costante, G.; Bellocchio, E.; Valigi, P.; Fravolini, M. L.; Ciarfuglia, T. A., Robotics and Autonomous Systems, 92, 53- 65, 2017.

30. "Exploring Representation Learning With CNNs for Frame-to-Frame EgoMotion Estimation", Costante, G.; Mancini, M.; Valigi, P; Ciarfuglia, T.A., IEEE Robotics and Automation Letters, 2016. Best Vision Paper Finalist nella conferenza International Conference on Robotics and Automation, 2016

31. "Transferring knowledge across robots: A risk sensitive approach", Costante, G.; Ciarfuglia, T.A.; Valigi, P; Ricci, E., Robotics and Autonomous Systems, Elsevier, 2015.

32. "Evaluation of Non-Geometric Methods for Visual Odometry, Ciarfuglia", T.A.; Costante, G.; Valigi, P; Ricci, E., Robotics and Autonomous Systems, Elsevier, 2014

Articles in conferences (24):

1. "Monocular Reactive Collision Avoidance for MAV Teleoperation with Deep Reinforcement Learning" Brilli, R.; Legittimo, M.; Crocetti, F.; Leomanni, M; Fravolini, M.L.; Costante, G.; AIAA SCITECH 2023 Forum, 2023

2. "Robust Output Feedback Control of a Quadrotor UAV for Autonomous Vision-Based Target Tracking" Leomanni, M.; Ferrante, F.; Cartocci, N; Costante, G.; Fravolini, M.L.; Dogan, K.M.; Yucelen, T.; AIAA SCITECH 2023 Forum, 2023

3. "Development of a Cooperative Localization System using a UWB Network and BLE Technology" Brunacci, V.; De Angelis, A.; Costante, G; IEEE International Symposium on Measurements & Networking (M&N), 2022

4. "Classification of Thyroid Diseases Using Machine Learning and Bayesian Graph Algorithms" Mollica, G.; Francesconi, D.; Costante, G.; Moretti, S.; Giannini, R.; Puxeddu, E.; Valigi, P.; IFAC-PapersOnLine 2022

5. "Linear control of a nonlinear aerospace system via extended dynamic mode decomposition" Cartocci, N.; Monarca, A.; Costante, G.; Fravolini, M.L.; Dogan, K. M.; Yucelen, T.; AIAA Scitech 2022 Forum

6. "Monocular Reactive Collision Avoidance Based on Force Fields for Enhancing the Teleoperation of MAVs" Brilli, R; Pozzi, M; Giorgetti, F.; Fravolini, M.L; Valigi, P.; Prattichizzo, D.; Costante, G.; 20th International Conference on Advanced Robotics - Dicembre 6-10, 2021. Ljubljana, Slovenia

7. "Data-Driven Sensor Fault Diagnosis Based on Nonlinear Additive Models and Local Fault Sensitivity". Cartocci, N.; Crocetti, F.; Costante, G.; Valigi, P.; Napolitano, M.; Fravolini, M.L; 20th International Conference on Advanced Robotics - Dicembre 6-10, 2021. Ljubljana, Slovenia

8. "GOLN: Graph Object-Based Localization Network". Felicioni, S.; Legittimo, M.; Fravolini, M.L; Costante, G.; 20th International Conference on Advanced Robotics - Dicembre 6-10, 2021. Ljubljana, Slovenia

9. "Tire-road friction estimation and uncertainty assessment to improve electric aircraft braking system", Crocetti, F.; Costante, G.; Fravolini, M. L.; Valigi, P., IEEE 28th Mediterranean Conference on Control and Automation (MED), 2021.

10. "A Robust Data-Driven Fault Diagnosis scheme based on Recursive Dempster–Shafer Combination Rule", Cartocci, N.; Napolitano, M.R.; Costante, G.; Crocetti, F.; Valigi, P.; Fravolini, M. L., IEEE 28th Mediterranean Conference on Control and Automation (MED), 2021.

11. "A Data-Driven Slip Estimation Approach for Effective Braking Control under Varying Road Conditions"., Crocetti, F.; Costante, G.; Fravolini, M. L.; Valigi, P. IEEE 28th Mediterranean Conference on Control and Automation (MED), 2020.

12. "PCA Methods and Evidence Based Filtering for Robust Aircraft Sensor Fault Diagnosis". , Cartocci, N.; Costante, G.; Napolitano, M. R.; Valigi, P.; Crocetti, F.; Fravolini, M. L., IEEE 28th Mediterranean Conference on Control and Automation (MED), 2020.

13. "Data-Based Desing of Robust Fault Isolation Residuals Using LASSO Optimization". Cascianelli S., Crocetti F., Costante G., Valigi P. and Fravolini M.L. IEEE International Conference on Control, Automation and Diagnosis, 2019

14. "Experimental Prediction Intervals for Monitoring Wind Turbines: an Ensemble Approach". Cascianelli S., Astolfi D., Costante G.,Castellani F. and Fravolini M.L. IEEE International Conference on Control, Automation and Diagnosis, 2019

15. "Visual Localization in the Presence of Appearance Changes Using the Partial Order Kernel". Abdollahyan M., Cascianelli S., Bellocchio E., Costante G., Ciarfuglia T.A., Bianconi F., Smeraldi F., Fravolini M.L. 26th European Signal Processing Conference (EUSIPCO), 2018

16. "Towards Monocular Digital Elevation Model (DEM) Estimation by Convolutional Neural Networks-Application on Synthetic Aperture Radar Images". Costante G., Ciarfuglia T.A., Biondi F. EUSAR 12th European Conference on Synthetic Aperture Radar, 2018

17. "Fast robust monocular depth estimation for Obstacle Detection with fully convolutional networks", Mancini, M.; Costante, G.; Valigi, P.; Ciarfuglia, T.A., IEEE/RSJ International Conference on Intelligent Robotcs and Systems, 2016.

18. "SmartSEAL: A ROS based home automation framework for heterogeneous devices interconnection in smart buildings", Bellocchio, E.; Costante, G.; Cascianelli, S.; Valigi, P.; Ciarfuglia, T.A., IEEE International Conference Smart Cities Conference, 2016.

19. "A robust semi-semantic approach for visual localization in urban environment", Cascianelli, S.; Costante, G.; Bellocchio, E.; Valigi, P; Fravolini, M.L.; Ciarfuglia, T.A., IEEE International Conference Smart Cities Conference, 2016

20. "Personalizing Vision-based Gestural Interfaces for HRI with UAVs: a Transfer Learning Approach", Gabriele Costante, Enrico Bellocchio, Paolo Valigi and Elisa Ricci, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Chicago, U.S.A.

21. "Personalizing a Smartwatch-based Gesture Interface with Transfer Learning", Gabriele Costante, Lorenzo Porzi, Oswald Lanz, Paolo Valigi, Elisa Ricci, European Signal Processing Conference (EUSIPCO), Lisbon, Portugal. 2014

22. "Exploiting transfer learning for personalized view invariant gesture recognition", Gabriele Costante, Valerio Galieni, Yan Yan, Mario Luca Fravolini, Elisa Ricci, Paolo Valigi, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Florence, Italy.

23. "Transfer Learning for Visual Place Classification", Costante, G.; Ciarfuglia, T.A.; Valigi, P. and Ricci, E., RSS Workshop on Robots in Clutter: Preparing robots for the real world. 2013.

24. "A transfer learning approach for multi-cue semantic place recognition", Costante, G.; Ciarfuglia, T.A; Valigi, P.; Ricci, E., Intelligent Robots and Systems (IROS), 2013. 2012 A discriminative approach for appearance based loop closing, Ciarfuglia, T.A; Costante, G.; Valigi, P.; Ricci, E., Intelligent Robots and Systems (IROS), 2012.

Awards

Date of Achievement	13/11/2020
Recognition	**National scientific certification (ASN)** for SC 09/G1 – SSD ING-INF/04 for the functions of university associate professor
Date of achievement	28/02/2020
Recognition	**2020 Robotics Travel Award** for research activity and scientific curriculum. Award size: 800 CHF - Awarded by: international journal *Robotics* - MDPI
Date of achievement	01/11/2018
Recognition	**Outstanding Reviewer Award**, presented by the Elsevier journal, *Robotics and Autonomous Systems* for the contribution as a reviewer.
Date of achievement	19/05/2016
Recognition	**Best vision paper award** – Finalist for the paper "Exploring Representation Learning with CNNs for Frame-to-Frame Ego Motion Estimation" in *the IEEE International Conference on Robotics And Automation (ICRA)* 2016

Reviewer Activities

International Journals	IEEE Robotics and Automation Letters, IEEE Transactions on Robotics, IEEE Transactions on Industrial Informatics, IEEE Access, IEEE Robotics and Automation Magazine, IEEE Transactions on Computational Imaging, Pattern Recognition, Pattern Recognition Letters, Autonomous Robot, Robotics and Autonomous System, Journal on Intelligent Service Robotics, Engineering Applications of Artificial Intelligence, IEEE Sensors.
International Conferences	International Conference on Intelligent Robots and Systems (IROS) – (various editions); IEEE International Conference on Robotics and Automation (ICRA) – (various editions); IEEE 20th International Conference on Advanced Robotics (ICAR) – (2021)

University Teaching

Date (da - a)	A.A. 2020-2021
Name and address of the employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Occupation or position held	**Lecturer**

Assignment information	Lecturer of "Computer Vision and Robot Perception", **Master's Degree in Computer Engineering and Robotics (LM-32),** duration: 48 hours
Date (da - a)	A.A. 2020-2021, 2021-2022
Employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Type of use	**Lecturer**
Assignment information	Lecturer of "Machine Learning and Data Analysis", **Master's Degree in Computer Engineering and Robotics (LM-32),** duration: 72 hours
Date (da - a)	A.A. 2017-2018, 2018-2019, 2019-2020
Employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Type of use	**Lecturer**
Assignment information	Lecturer of "Computer Vision", **Master's Degree in Computer Engineering and Robotics (LM-32),** duration: 48 hours
Data	28/06/2015
Employer	Department of Engineering, University of Perugia, via G. Duranti 93, 06125, Perugia (PG), Italy
Type of use	**Lecturer**
Assignment information	Seminar entitled "Computer vision for robotic and UAV applications", within the international doctoral school IEEE Advanced course for graduate students and industrial research.

PROFESSIONAL TEACHING

Date (da - a)	2019 and 2020
Employer	ITS Umbria Smart Academy, Via Palermo, 80/A 06124 Perugia
Type of use	**Teaching Assignment**
Assignment information	Teacher of the module "Big Data Management and Analitycs", as part of the training course "Technician for Automation and Mechatronic Systems with specialization in the Development of Technologies for Industry 4.0".
Data	06/06/2019
Employer	Training Systems Confindustria Umbria (SFCU), via Palermo 80/A, Perugia (PG)
Type of use	**Teaching Assignment**
Assignment information	Teaching within the module "Big Data Management & Machine Learning".

RESPONSIBILITIES AND PARTICIPATION IN FUNDED PROJECTS

Date (da - a)	July 2020 to December 2021
Role	**Technical Manager** for the Department of Engineering of the University of Perugia and sole representative of the academic subjects within the Technical Committee of the AGROBOT Network
Project	"AGROBOT: autonomous robots at the service of economic growth and environmental sustainability of Umbrian agriculture". The project is funded by

	the Umbria region through the 2014-2020 PSR call – Measure 16 – Submeasure 16.2 – Networks or Poles.
Date (da - a)	June 2020 to December 2021
Role	**Technical Manager** for the Department of Engineering of the University of Perugia
Project	"Integration of autonomous functionalities in an electric vehicle and interoperability with the "smart road" infrastructure". The project, entrusted by the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), is funded by MISE under the 2019-2021 Program Agreement for research and development activities of general interest for the national electricity system: Objective "Technologies", research theme "1.7 Technologies for the penetration of the electric carrier in end uses".
Date (da - a)	2015-present
Role	**Participation** on various research projects with different companies and industries.

SERVICE ACTIVITIES AT THE UNIVERSITY

Date (da - a)	2020 to present
Assignment	**Member of the Board of Professors of the PhD Course** in Industrial and Information Engineering of the University of Perugia
Date (da - a)	2020 to present
Assignment	**Tutor and Co-tutor** of PhD students
Date (da - a)	December 2021 to present
Assignment	**Member of the Commission for Study Plans** of the Intergraduate Council in Information Engineering.

TECHNOLOGY TRANSFER

Date (da - a)	2016 to present
Activity	**Founding partner** of the innovative start-up "Weedea s.r.l. "
Website	https://www.weedea.com/
Date (da - a)	2020 to present
Activity	**Member of the proposing group of the spin-off** "Red Lynx Robotics s.r.l."
Website	https://www.redlynxrobotics.com

LANGUAGE SKILLS

MOTHER TONGUE	**ITALIAN**

OTHER LANGUAGES

	ENGLISH
Reading Skills	EXCELLENT
Writing skills	EXCELLENT

Oral expression skills	EXCELLENT
	GERMAN
Reading Skills	ELEMENTARY
Writing skills	ELEMENTARY
Oral expression skills	ELEMENTARY