

Lorenzo Palazzetti

Curriculum Vitæ

Last update: February 11, 2026

Short Biography

I earned my Bachelor's and Master's degrees in Computer Science from the University of Perugia, Italy, in 2018 and 2020, respectively, and received a Ph.D. in Computer Science with distinction from the University of Florence, Italy, in 2024. Following my Ph.D., I held a HALY.ID Research Fellowship at the University of Perugia, where I played a leading role in the design and implementation of IoT- and computer vision-based smart monitoring systems for insect populations. I subsequently served as a Postdoctoral Researcher at the University of Perugia, where I conducted independent research on Beyond Visual Line of Sight (BVLOS) autonomous drone mobility, focusing on vision-driven perception, robust routing and navigation in GPS-denied environments, and multi-sensor integration for autonomous aerial systems. I am currently a Postdoctoral Researcher at The Pennsylvania State University, where I lead research efforts on the integration of advanced algorithms, artificial intelligence, and sensor-based systems for intelligent livestock and agricultural monitoring, with an emphasis on scalable, deployable solutions. My research agenda lies at the intersection of algorithm design and analysis, combinatorial optimization, unmanned and autonomous systems, computer vision, and the Internet of Things (IoT). I develop theoretically grounded and computationally efficient frameworks that enable autonomy, perception, and decision-making in complex, real-world environments. My work is driven by the goal of translating rigorous algorithmic research into robust, field-validated systems with measurable societal and environmental impact.

Research Interests

Algorithms Design, Combinatorial Optimization, Unmanned Vehicles, Computer Vision, IoT, Ultra-Constrained Systems, Edge Computing.

Education

11/2020–04/2024 **Ph.D., Computer Science.** Thesis title: “*Optimizing Drone-Based Applications for Delivery and Smart Agriculture*”. Advisor: Maria Cristina Pinotti, Dept. of Computer Science and Math., University of Florence (Italy). Judgment: *Excellent with praise.*

- 12/2018–09/2020 **M.Sc., Computer Science.** Thesis title: “*Routing drones being aware of wind conditions: the wind impact on the drone’s route*”. Advisor: Maria Cristina Pinotti. Dept. of Computer Science and Math., University of Perugia (Italy). Judgment: *summa cum laude*.
- 09/2015–11/2018 **B.Sc., Computer Science.** Thesis title: “*Lattice-Based Cryptography*”. Advisor: Marco Baiocchi. Dept. of Computer Science and Math., University of Perugia (Italy). Judgment: *104/110*.
- 09/2010–07/2015 **Secondary School Diploma in IT.** Technical Pole Franchetti Salviani, Città di Castello (Italy). Judgment: *100/100*.

Work Experience

- 11/2025–11/2027 **Postdoctoral Researcher.** Pennsylvania State University, Pennsylvania, USA.
OBJECTIVES:
- **System Development:** Designed and developed smart monitoring systems tailored for poultry and dairy cattle farms, integrating Internet of Things (IoT) technologies with computer vision to enable automated, data-driven livestock management.
 - **IoT Integration:** Implemented a network of smart sensors for continuous collection of environmental and physiological data, including temperature, humidity, movement, and feeding patterns, ensuring accurate real-time monitoring of animal conditions.
 - **Computer Vision Solutions:** Developed image and video analysis algorithms to detect and track animal behaviors, identify anomalies, and monitor health indicators such as posture, activity levels, and feeding behavior.
 - **Data Processing and Analytics:** Built data pipelines and analytics dashboards to visualize key performance indicators, supporting predictive maintenance and early detection of health or welfare issues.
- 07/24–11/25 **Postdoctoral Researcher.** Università degli Studi di Perugia, Perugia, Italy.
OBJECTIVES: Development of advanced algorithms based on computer vision and artificial intelligence for autonomous drone navigation in BV-LoS mode in GNSS-less environments.
- 02/2024–NOW **Algorithm and Data Structures Teaching Assistant.** Università degli Studi di Perugia, Perugia, Italy.

- 11/23–06/24 **Haly.ID Project Research Fellow.** Università degli Studi di Perugia, Perugia, Italy.
 TITLE: “IoT data integration with drones: from raw data to activity logbook. Principles of certification”.
 OBJECTIVES:
- Integration of UAV and IoT: protocol definition and implementation;
 - Designing and development of data harvesting and management algorithms (including image elaboration);
 - Logbook: designing, and implementation of a trusted logbook for the data collected in the orchard; designing of certification techniques providing a preliminary implementation.
- 10/2023–01/2024 **Algorithm and Data Structures Tutoring.** Università degli Studi di Perugia, Perugia, Italy. (Total hours: 27)
- 11/2022–06/2023 **Algorithm and Data Structures Tutoring.** Università degli Studi di Perugia, Perugia, Italy. (Total hours: 57)
- 03/2022–06/2022 **Algorithm and Data Structures Tutoring.** Università degli Studi di Perugia, Perugia, Italy. (Total hours: 35)
- 10/2019–12/2019 **University Internship.** Advisor: Valentina Poggioni. Project title: *Neural Collaborative Filtering: a Framework for Recommendations*. Dept. of Computer Science and Math., University of Perugia.
- 04/2018–06/2018 **System Manager.** Comune di Umbertide, Perugia, Italy.
- 03/2014–05/2014 **System Manager.** Comune di Città di Castello, Perugia, Italy.

Teaching

- 08/24–12/24 “Didactics of algorithms and data structures (including correctness, complexity and classical algorithms)” course. University of Perugia, Italy. 12 hours/3 CFU

Research Publications

Journal Articles

- (a) **Palazzetti, L.**, Giannetti, D., Verolino, A., Grasso, D.A., Pinotti, C.M. and Betti Sorbelli, F. 2025. “AntPi: A Raspberry Pi based edge–cloud system for real-time ant species detection using YOLO”. *Ecological Informatics*. 91, (Nov. 2025), 103383. <https://doi.org/10.1016/j.ecoinf.2025.103383>.
- (b) Lennart Almstedt, Davide Baltieri, Francesco Betti Sorbelli, Davide Cattozzi, Daniele Giannetti, Amin Kargar, Lara Maistrello, Alfredo Navarra, David Niederprüm, Brendan O’Flynn, **Lorenzo Palazzetti**, Niccolo Patelli, Luca Piccinini, Cristina M Pinotti, Lars Wolf, Dimitrios

- Zorbas, “A Comprehensive Pest Monitoring System for Brown Marmorated Stink Bug”. **IEEE Transactions on AgriFood Electronics** vol. 3, no. 1, pp. 110-120, March-April 2025, doi: 10.1109/TAFE.2024.3469538.
- (c) **Lorenzo Palazzetti**, Aravind Krishnaswamy Rangarajan, Alexandru Dinca, Bas Boom, Dan Popescu, Peter Offermans, and Cristina M. Pinotti, “*The hawk eye scan: Halyomorpha halys detection relying on aerial tele photos and neural networks*”. In: Computers and Electronics in Agriculture (CEA). Volume 226, 2024, 109365, ISSN 0168-1699, <https://doi.org/10.1016/j.compag.2024.109365>.
 - (d) Lennart Almstedt, Davide Baltieri, Francesco Betti Sorbelli, Davide Cattozzi, Daniele Giannetti, Amin Kargar, Lara Maistrello, Alfredo Navarra, David Niederprüm, Brendan O’Flynn, **Lorenzo Palazzetti**, Niccolo Patelli, Luca Piccinini, Cristina M Pinotti, Lars Wolf, Dimitrios Zorbas, “*Beyond The Naked Eye: Computer Vision for Detecting Brown Marmorated Stink Bug and Its Punctures*”. **IEEE Transactions on AgriFood Electronics** vol. 3, no. 1, pp. 6-17, March-April 2025, doi: 10.1109/TAFE.2024.3429537.
 - (e) Francesco Betti Sorbelli, Federico Corò, Punyasha Chatterjee, Sajjad Ghobadi, **Lorenzo Palazzetti**, and Cristina M. Pinotti, “*A Novel Graph-Based Multi-Layer Framework for Managing Drone BVLoS Operations*”. **IEEE Transactions on Network and Service Management** vol. 21, no. 5, pp. 5091-5105, Oct. 2024, doi: 10.1109/TNSM.2024.3401175.
 - (f) Daniele Giannetti, Niccolò Patelli, **Lorenzo Palazzetti**, Francesco Betti Sorbelli, Cristina M. Pinotti, and Lara Maistrello. (2024), “*First use of unmanned aerial vehicles to monitor Halyomorpha halys and recognize it using artificial intelligence*”. In: Wiley Pest Management Science vol. 80, ISSN: 1526-4998, April 2024, <http://dx.doi.org/10.1002/ps.8115>.
 - (g) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, **Lorenzo Palazzetti**, and Cristina M. Pinotti, “*Drone-based Bug Detection in Orchards with Nets: A Novel Orienteering Approach*”. In: ACM Transactions on Sensor Networks, 20, 3, Article 68 (May 2024), 28 pages. <https://doi.org/10.1145/3653713>.
 - (h) Francesco Betti Sorbelli, **Lorenzo Palazzetti**, Cristina M Pinotti, “*YOLO-based Detection of Halyomorpha halys in Orchards Using RGB Cameras and Drones*”. In: Computers and Electronics in Agriculture (CEA) Volume 213, 2023, 108228, ISSN 0168-1699, <https://doi.org/10.1016/j.compag.2023.108228>.
 - (i) Francesco Betti Sorbelli, Alfredo Navarra, **Lorenzo Palazzetti**, Cristina M. Pinotti, and Giuseppe Prencipe. “*Wireless IoT Sensors Data Collection Reward Maximization by Leveraging Multiple Energy-and Storage-Constrained UAVs*”. Journal of Computer and System Sciences (JCSS), Volume 139, 2024, 103475, ISSN 0022-0000, <https://doi.org/10.1016/j.jcss.2023.103475>.
 - (j) Francesco Betti Sorbelli, Federico Corò, Sajal K Das, **Lorenzo Palazzetti**, Cristina M Pinotti. “*How the Wind Can Be Leveraged for Saving Energy in a Truck-Drone Delivery System*”. **IEEE Transactions on Intelligent Transportation Systems (T-ITS)** vol. 24, no. 4, pp. 4038-4049, April 2023, doi: 10.1109/TITS.2023.3234627.
 - (k) Francesco Betti Sorbelli, Federico Corò, Sajal K Das, **Lorenzo Palazzetti**, Cristina M Pinotti. “*On the Scheduling of Conflictual Deliveries in a last-mile delivery scenario with truck-carried drones*”. In: Pervasive and Mobile Computing (PMC) Volume 87, 2022, 101700, ISSN 1574-1192, <https://doi.org/10.1016/j.pmcj.2022.101700>.

Conference and Workshop Proceedings

- (1) F. B. Sorbelli, P. Das, **L. Palazzetti**, C. M. Pinotti, “*EdgeNeXt: A Lightweight Model for UAV-Based Gesture Recognition from Aerial Perspectives*”. IEEE International Conference on Communications (ICC 2026) (accepted)
- (2) F. B. Sorbelli, **L. Palazzetti**, C. M. Pinotti, “*Outdoor Accuracy Evaluation of DecaWave’s DWM1002 PDoA Kit Measurements*”. IEEE International Conference on Communications (ICC 2026) (accepted)
- (3) F. B. Sorbelli, S. Ghobadi, **L. Palazzetti** and C. M. Pinotti, “*Optimizing the Number of Drones for Aerial Power-Line Maintenance*”. 21st International Symposium on Algorithmics of Wireless Networks, ALGOWIN 2025, Warsaw, Poland, 2025, doi: 10.1007/978-3-032-09120-8_4
- (4) F. B. Sorbelli, S. Ghobadi, **L. Palazzetti** and C. M. Pinotti, “*Integrating Ground Communication for Extended Drone Visual Line of Sight*”. 2025 21th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), Marrakesh, Morocco, 2025, pp. 1-6, doi: 10.1109/WiMob66857.2025.11257561.
- (5) Sorbelli, F.B., Ghobadi, S., **Palazzetti, L.** and Pinotti, C.M. 2025. “*Power Line Maintenance Using Multi-Package Collaborative Drone-Truck System*”. 2025 21st International Conference on Distributed Computing in Smart Systems and the Internet of Things (DCOSS-IoT). IEEE.
- (6) Federico Corò, **Lorenzo Palazzetti**, “*Pest Countermeasures Development Through Digital Twin Orchard Simulations*”. In: International Workshop on Digital Twins: Mathematical Analysis, Formal Methods and Scientific Machine Learning, Padova, Italy, February 19-21 2025.
- (7) Francesco Betti Sorbelli, **Lorenzo Palazzetti**, Cristina M. Pinotti, “*A Drone-Based Automated Halyomorpha Halys Scouting: A Case Study on Orchard Monitoring*”. In: IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor), Pisa, Italy, 2023, pp. 380-385, doi: 10.1109/MetroAgriFor58484.2023.10424287
- (8) Francesco Betti Sorbelli, **Lorenzo Palazzetti**, Cristina M. Pinotti, “*Preliminary Results for Halyomorpha Halys Monitoring Relying on a Custom Dataset*”. In: IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor), Pisa, Italy, 2023, pp. 363-368, doi: 10.1109/MetroAgriFor58484.2023.10424403.
- (9) Dinca Alexandru, Popescu Dan, Maria Cristina Pinotti, Ichim Loretta, **Lorenzo Palazzetti**, Angelescu Nicoleta, “*Halyomorpha Halys Detection in Orchard from UAV Images Using Convolutional Neural Networks*”. In: IWANN International Work Conference on Artificial Neural Networks, (2023), Lecture Notes in Computer Science, vol 14135. Springer, Cham. https://doi.org/10.1007/978-3-031-43078-7_26.
- (10) Lennart Almstedt, Davide Baltieri, Francesco Betti Sorbelli, Davide Cattozzi, Daniele Giannetti, Amin Kargar, Lara Maistrello, Alfredo Navarra, David Niederprüm, Brendan O’Flynn, **Lorenzo Palazzetti**, Niccolo Patelli, Luca Piccinini, Cristina M. Pinotti, Lars Wolf, Dimitrios Zorbas, “*Technological Innovations in Agriculture for Scouting Halyomorpha halys in Orchards*”. In: 5th International Workshop on Intelligent Systems for the Internet of Things (ISIOT), Pafos, Cyprus, 2023, pp. 702-709, doi: 10.1109/DCOSS-IoT58021.2023.00110.
- (11) Francesco Betti Sorbelli, Punyasha Chatterjee, Federico Corò, **Lorenzo Palazzetti**, Cristina M. Pinotti, “*A Novel Multi-Layer Framework for BVLoS Drone Operation: A Preliminary Study*”.

In: IEEE INFOCOM DroneCom 2023 workshop, Hoboken, NJ, USA, 2023, pp. 1-6, doi: 10.1109/INFOCOMWKSHPS57453.2023.10225806.

- (12) Francesco Betti Sorbelli, Alfredo Navarra, **Lorenzo Palazzetti**, Cristina M Pinotti, Giuseppe Prencipe “*Optimal and Heuristic Algorithms for Data Collection by Using an Energy-and Storage-Constrained Drone*”. 18th International Symposium on Algorithms and Experiments for Wireless Sensor Networks, (ALGOSENSORS 2022) September 8-9, 2022, Lecture Notes in Computer Science, vol 13707. Springer, Cham. https://doi.org/10.1007/978-3-031-22050-0_2.
- (13) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, Emanuele Di Bella, Lara Maistrello, **Lorenzo Palazzetti**, Cristina M. Pinotti “*A Drone-based Application for Scouting Halyomorpha halys Bugs in Orchards with Multifunctional Nets*”. IEEE International Conference on Pervasive Computing and Communications Workshops and other Affiliated Events (PerCom Workshops), Pisa, Italy, 2022, pp. 127-129, doi: 10.1109/PerComWorkshops53856.2022.9767309. **(best demo award)**
- (14) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, **Lorenzo Palazzetti**, and Cristina M. Pinotti. “*Greedy Algorithms for Scheduling Package Delivery with Multiple Drones*”. In: 23rd International Conference on Distributed Computing and Networking (ICDCN), Association for Computing Machinery, 31-39. <https://doi.org/10.1145/3491003.3491028> New Delhi, India, January 4-7, 2022. **(best paper award)**
- (15) Francesco Betti Sorbelli, Federico Corò, Sajal K Das, *Lorenzo Palazzetti*, Cristina M Pinotti “*Drone-based optimal and heuristic orienteering algorithms towards bug detection in orchards*”. 18th Int. Conf. on Distr. Computing in Sensor Systems (DCOSS 2022) Marina del Rey, Los Angeles, CA, USA, 2022, pp. 117-124, doi: 10.1109/DCOSS54816.2022.00032.
- (16) Francesco Betti Sorbelli, Federico Corò, Sajal K. Das, **Lorenzo Palazzetti**, and Cristina M. Pinotti. “*Cooperative Truck-Drone Scheduling Approach for Last-Mile Deliveries*”. In: Italian Conference on Theoretical Computer Science (ICTCS short paper), September 13-15, 2021.
- (17) **Lorenzo Palazzetti**, Cristina M. Pinotti, and Giulio Rigoni. “*A run in the wind: Favorable winds make the difference in drone delivery*”. 17th International Conference on Distributed Computing in Sensor Systems (DCOSS), Pafos, Cyprus, 2021, pp. 109-116, doi: 10.1109/DCOSS52077.2021.00031.
- (18) **Lorenzo Palazzetti**. “*Routing Drones Being Aware of Wind Conditions: a Case Study*”. 17th International Conference on Distributed Computing in Sensor Systems (DCOSS), Pafos, Cyprus, 2021, pp. 343-350, doi: 10.1109/DCOSS52077.2021.00062.

Miscellaneous Experience

Visiting periods abroad

07/2023

Technische Universität Braunschweig (TUBS), Braunschweig, Germany.

Mentoring Activity

Master Thesis

- (1) (2024) “Cimice Asiatica: Controllo e Monitoraggio con Dashboard Interattive e Algoritmi di Computer Vision su NVIDIA Jetson”, Fabio Bocchini, University of Perugia, Italy.
- (2) (2025) “Data Structures and Didactic Exercises for Teaching *Algorithms and Data Structures*”, Simone Bonacorsi, University of Perugia, Italy.

Bachelor Thesis

- (1) (2025) “Panoramica sugli approcci combinatorici nell’impiego dei droni per le spedizioni e la consegna dei pacchi”, Stefano Biagini, University of Perugia, Italy.

Conferences and Workshops

7th International Workshop on Wireless Sensors & Drones in IoT Conference Wi-DroIT 2025, Lucca, Italy June 9-11, 2025 [**presenter**]

International Workshop on Digital Twins: Mathematical Analysis, Formal Methods and Scientific Machine Learning (DTW), Padova, Italy, February 19-21, 2025 [**presenter**]

Final Workshop on “Studio di scenari multirischio per i disastri naturali nell’area dell’Italia centro-meridionale e della Sicilia”, Perugia, Italy, 5 Dec, 2024 [**presenter**]

Demonstration of “Hawk Eye Scan: Halyomorpha Halys Detection Relying on Aerial Tele Photos and Neural Networks”, Haly.ID project, Carpi, Italy, 24-25 May, 2024 [**presenter**]

IEEE INFOCOM DroneCom 2023, Drone-Assisted Wireless Communications for 5G and Beyond workshop, New York, USA, 17-20 May, 2023 [**audience**]

Progetto Algoritmi per il controllo distribuito Micro MAcro robots (MIMA) GCNS INDAM in Pisa, Italy, April 4-6, 2023 [**audience**]

NVIDIA GTC in Virtually, March 21-23, 2023 [**audience**]

2nd Workshop Haly.ID in Perugia, Italy February 13-14, 2023 [**presenter**]

ALGOSENSORS 2022, International Symposium on Algorithms and Experiments for Wireless Sensor Networks, Potsdam, Germany, September 8-9, 2022 [**presenter**]

IEEE DCOSS 2022, International Conference on Distributed Computing in Sensor Systems, Marina Del Rey, LA, California, May 30-June 1, 2022 [**presenter**]

IEEE PerCom 2022, International Conference on Pervasive Computing and Communications, in Pisa, Italy, March 21-25, 2022. [**audience**]

ACM ICDCN 2022, International Conference on Distributed Computing and Networking, in New Delhi, India, January 4-7, 2022 [**audience**]

IEEE DCOSS 2021, International Conference on Distributed Computing in Sensor Systems, in Coral Bay, Pafos, Cyprus, July 14-16, 2021 [**audience**]

ICTCS Italian Conference on Theoretical Computer Science, in Bologna, Italy September 13-15, 2021 [**presenter**].

IEEE Wi-DroIT 2021, International Workshop on Wireless sensors and Drones in Internet of Things, in Coral Bay, Pafos, Cyprus, July 14-16, 2021 [**presenter**].

HALG 2021, Highlights of Algorithms, online, May 31-3 June, 2021 [**audience**].

Awards and Achievements

Award, Best paper in 2022 International Conference on Distributed Computing and Networking (ICDCN 2022).

Award, Best demo in 2022 International Conference on Pervasive Computing and Communications (PerCom 2022).

Award, Travel Grant in 2022 International Conference on Pervasive Computing and Communications (PerCom 2022).

Award, Travel Grant in International Workshop on Digital Twins: Mathematical Analysis, Formal Methods and Scientific Machine Learning (DTW 2025).

Achievement, Best paper candidate in 2025 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor 2025), Bologna, Italy, 28-30 October 2025.

Talks and Seminars Held

20/02/2025	<i>“Pest Countermeasures Development Through Digital Twin Orchard Simulations”</i> , Padova, Italy. seminar .
05/12/2024	<i>“Designing UAV-Assisted Systems for Enhanced Data Collection in Wireless Sensor Networks”</i> , Perugia, Italy. seminar .
25/11/2024	<i>“Optimizing Drone-Based Applications for Delivery and Smart Agriculture”</i> , Campus Da Vinci, Umbertide, Italy. seminar .
21/03/2024	<i>“A Gentle Introduction to Computer Vision for Pest Management”</i> , Parma, Italy. seminar .
20/03/2024	<i>“Introduction to Computer Vision”</i> , Perugia, Italy. class .
11/07/2023	<i>“Next-Generation Farming: Drone Technology and Computer Vision to Mitigate Stink Bug Infestations”</i> , Braunschweig, Germany. seminar .
10/05/2023	<i>“Transforming Farming with Drones: Harnessing Data for Precision Agriculture”</i> , Perugia, Italy. class .
13/02/2023	<i>“Halyomorpha Halys Detection using Drone-Captured Images and YOLOv5”</i> , Perugia, Italy. seminar .
14/02/2023	<i>“Exploring the Advancements in Real-Time Object Detection: An Insight into DJI Matrice’s Application”</i> , Perugia, Italy. seminar .
21/04/2023	<i>“UNIPG Report: Release of the Latest Drone Application, Machine Learning Advancements, and Preliminary Time Series Analysis”</i> , Perugia, Italy. seminar .

16/06/2023	<i>"Machine Learning Advancements in Haly.ID project"</i> , Perugia, Italy. seminar .
14/10/2022	<i>"A Discussion about Smart Agriculture Technologies for Scouting Halyomorpha halys in Orchards"</i> , Rolla, MO, USA. seminar .
05/04/2022	<i>"Routing Drones Being Aware of Wind Conditions"</i> , Perugia, Italy. class .
14/12/2021	<i>"Drones & their Applications"</i> , Perugia, Italy. class .
14/03/2021	<i>"Transaction & Fork Bitcoin"</i> , Perugia, Italy. seminar .
14/03/2021	<i>"Tor & deanonymization attacks"</i> , Perugia, Italy. seminar .

Talks and Seminars Attended

31/01/2024	<i>"Future Satellite Communications for 5G/6G"</i> , Speaker: Zhili Sun, University of Surrey, UK.
05/11/2023	<i>"Use Your Own CUDA ROS Node with NITROS on NVIDIA Jetson"</i> , Speaker: NVIDIA Corporation.
04/10/2023	<i>"Single machine scheduling in additive manufacturing with two-dimensional packing constraints"</i> , Speaker: Kan Fang Tianjin University.
28/07/2023	<i>"Spatially-Coupled Hidden Markov Models for Short-Term Forecasting of Wind Speed"</i> , Speaker: Vianey Leos Barajas University of Toronto.
18/01/2023	<i>"Recent Advances in Flow Time Scheduling"</i> , Speaker: Lars Rohwedder Maastricht University.
02/12/2022	<i>"Machine-Learning Applications in Process-understanding and Prediction of Wildfire"</i> , Speaker: Jiafu Mao, from Oak Ridge National Laboratory.
14/03/2022	<i>"Trustworthy Machine Learning with Differential Privacy and Certified Robustness"</i> , Speaker: Dr. Ardhendu Tripathy, Missouri S&T.
21/02/2022	<i>"Towards High-Throughput Cryptocurrency Transactions in Payment Channel Networks"</i> , Speaker: Dr. Dejun Yang, Department of Computer Science, Colorado School of Mines.
14/02/2022	<i>"Data Integration: The Forgotten Stepchild of Data Science"</i> , Speaker: Dr. Roger D. Chamberlain, CSE Department, Washington University in St. Louis.
16/12/2021	<i>"Genomic Analysis at Scale: Mapping Irregular Computations to Advanced Architectures"</i> , Speaker: Katherine Yelick, University of California Berkeley and Lawrence Berkeley National Laboratory.
24/11/2021	<i>"Tabu search for the time-dependent vehicle routing problem with time windows on a road network"</i> , Speaker: Michel Gendreau, Polytech Montréal.
10/11/2021	<i>"Train Scheduling: Models, decomposition methods and practice"</i> , Speaker: Carlo Mannino, SINTEF & Oslo University.
25/10/2021	<i>"The Impact of Transportation Networks, Vaccines, and Vaccine Hesitancy on Epidemic Spreading"</i> , Speaker: Dr. Philip E. Paré, Purdue University.

30/08/2021	<i>“Computational Sustainability: Computing for a Better World and a Sustainable Future”</i> , Speaker: Carla P. Gomes, Department of Computer Science Cornell University.
04/05/2021	<i>“Toward efficient and safe intelligent aerial robotics and aerial manipulation, AIDA lectures”</i> , Speaker: Prof. Anibal Ollero, University of Seville.
30/04/2021	<i>“Secure Information Forwarding through Fragmentation in Delay-tolerant Networks”</i> , Speaker: Dr. Sanjay K Madria, Department of Computer Science, Missouri S&T.
23/04/2021	<i>“Advanced Computing for NASA Science and Engineering”</i> , Speaker: Dr. Rupak Biswas, NASA Ames Research Center.

General Chair

IEEE Wi-DroIT (2025, 2026).

Co-organizer IEEE MetroAgriFor (2024, 2025).

Technical Program Committee Member

International Conference on Distributed Computing in Smart Systems and the Internet of Things (DCOSS-IoT) (2026).

SMARTCOMP Posters/WIP - Demos (2024, 2025,2026).

International Conference on Pervasive Computing and Communications - Demo Track (Per-Com 2025).

International Conference on Pervasive Computing and Communications - PhD Forum (Per-Com 2026).

International Conference on Distributed Computing and Networking (ICDCN 2026).

International Conference on Distributed Computing and Networking - Doctoral Symposium (ICDCN 2025).

International Workshop on Unmanned Vehicles and IoT (UAV-IoT 2024, 2025).

IEEE ASDRoNet (2024).

ALLSENSORS (2024, 2025).

SENSORCOMM (2024, 2025).

SENSORDEVICES (2024, 2025).

International Conference on Accessible Digital Agriculture Technologies (CADAT 2024,2025,2026).

International Symposium on Algorithmics of Wireless Networks (ALGOWIN 2025).

International Workshop on Networked Robotics and Communication Systems (NetRobiCS 2025, 2026).

Web Chair

IEEE Wi-DroIT (2023, 2025, 2026).

IEEE ASDRoNet (2024).

Publicity Chair

IEEE ASDRoNet (2024).

IEEE MetroAgriFor (2024).

IEEE Wi-DroIT (2024).

IEEE DCOSS-IoT (2025, 2026).

Reviewer activity

Journals

Taylor and Francis Geo-Spatial Information Science.

Taylor and Francis Transportmetrica B: Transport Dynamics.

ACM Transactions on Sensor Networks (TOSN).

ACM Journal on Autonomous Transportation Systems (JATS).

F1000Research.

Elsevier Transportation Research Interdisciplinary Perspectives (TRIP).

Elsevier European Journal of Operational Research (ECJOR).

Elsevier Expert Systems with Applications (ESWA).

Elsevier Pervasive and Mobile Computing (PMC).

Elsevier Computer and Electronics in Agriculture (CEA).

Elsevier Computers and Operations Research (COR).

Elsevier ARRAY.

Elsevier Smart Agricultural Technology.

Elsevier Ad Hoc Networks.

Elsevier Transportation Research Part C (TR-C).

Elsevier Computer Networks.

Elsevier Reliability Engineering & Systems Safety.

Elsevier Crop Protection.

IEEE Transactions on Mobile Computing (TMC).

IEEE Transactions on Network Science and Engineering (TNSE).

PAGEPress Journal of Agricultural Engineering (JAE).
 Tech Science Press Computers, Materials & Continua (CMC).
 Journal of Intelligent and Fuzzy Systems.
 MDPI Sensors.
 MDPI Aerospace.
 MDPI AI.
 MDPI Symmetry.

Workshops and Conferences

ACM SIGKDD (2022).
 IEEE WoWMoM (2022).
 AAMAS (2022).
 IEEE MetroAgriFor (2023, 2024, 2025).
 IEEE WoWMoM (2024).
 IEEE DCOSS (2024, 2026).
 IEEE Wi-DroIT (2023, 2024, 2025).
 International Conference on Smart Computing (SMARTCOMP 2024, 2025).
 International Workshop on Unmanned Vehicles and IoT (UAV-IoT 2024, 2025).
 IEEE ASDRoNet (2024).
 CADAT (2024).
 ICDCN (2025, 2026).
 IEEE NetRobotics (2025, 2026).
 International Symposium on Algorithmics of Wireless Networks (ALGOWIN 2025).

Research Groups and Funds to Which I Belong

2024–2025	Affiliation , BREADCRUMBS group. Head: Prof. Francesco Betti Sorbelli.
2020–2023	Member , Association for Computing Machinery (ACM).
2022–NOW	Member , Institute of Electrical and Electronics Engineers (IEEE).
2020–2024	Member , International Project Haly.ID. Head: Prof. Cristina M. Pinotti.
2020–2024	Affiliation , Haly.ID Group. Head: Prof. Cristina M. Pinotti.
2020–NOW	Affiliation , Research institution (INdAM), GNCS Group. Head: Prof. Alfredo Navarra.

Skills

Computer

OS	Android, Linux, Microsoft Windows.
CODING	Bash, C, C++, Java, JavaScript, $\text{\LaTeX}$, MATLAB, Python, PHP, Visual Basic, Visual Basic for Applications, Pasqual, OCamel.
FRAMEWORK	Laravel, Bootstrap.
DATABASES	MySQL, PostgreSQL, SQLite.
WEB	jQuery, Ajax, JSON, CMS.
SERVER	Tomcat, Apache.
IDE	PyCharm, NetBeans.
SOFTWARE	Photoshop, Illustrator, Libreoffice, VirtualBox, Docker, BlueSky.

Languages

ITALIAN	Mother tongue.
ENGLISH	B2 Level.
FRENCH	A2 Level.

Other

DRONE LICENSE	A1/A3 Open Sub Category.
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