

GIUSEPPE SERRA

CURRENT ROLE

Associated Professor

Personal Information

⊠: giuseppe.serra@uniud.it

Training or research activities

From 03/11/2019 to present

Full-time Associate Professor at the Department of Mathematical, Computer and Physical Sciences, University of Udine.

Via Palladio, 8 – Udine

Activities: Research on Artificial Intelligence, Machine Learning; Frontal teaching and integration activities to teaching;

From 03/11/2016 to 02/11/2019

Full-time researcher at the Department of Mathematical, Computer and Physical Sciences, University of Udine.

Via Palladio, 8 – Udine

Activity: Research on Intelligence issues

From 14/04/2014 to 02/11/2016

Full-time researcher at the Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia.

Via Università, 4 – MODENA

Activities: Research on Multimedia and Computer Vision; Frontal teaching (6 CFU) and integration activities to teaching

Research grants:

From 01/01/2010 To 12/31/2010

University of FLORENCE - Piazza S. Marco, 4 - FLORENCE

Activity: "Development of systems for displaying multimedia content"

From 01/01/2011 To 12/31/2011

University of FLORENCE - P.zza S. Marco, 4 - FLORENCE

Activity: "Development of systems for displaying multimedia content"

From 01/01/2012 to 31/12/2012

University of FLORENCE - P.zza S. Marco, 4 - FLORENCE

Activity: "Automatic annotation of images and video sequences"

From 16/01/2013 to 15/01/2014

University of MODENA and REGGIO EMILIA - Via Università, 4 – MODENA

Activity: "Study of visual descriptors to be used for video analysis and retrieval"

From 16/01/2014 to 13/04/2014

University of MODENA and REGGIO EMILIA - Via Università, 4 – MODENA

Activity: "Study of visual descriptors to be used for video analysis and retrieval"

Contracts of coordinated and continuous collaboration:

From 05/16/2007 To 12/15/2007

University of FLORENCE - P.zza S. Marco, 4 - FLORENCE

Activity: "Support to research activities planned for the European Project VIDI-VIDEO on video ontologies and video content-based retrieval"

From 05/31/2008 To 12/31/2008

University of FLORENCE - P.zza S. Marco, 4 - FLORENCE

Activity: "Development of multimedia ontologies for annotation and retrieval of contents" within the European Project VIDI-VIDEO"

From 06/15/2009 To 11/15/2009

University of FLORENCE - P.zza S. Marco, 4 - FLORENCE

Activity: "Automatic annotation of events in video archives through the definition of an effective bag-of-word model" within the European Project VIDI-VIDEO"

Education and Training

21 April 2010

PhD in Computer Engineering, Multimedia and Telecommunications

University of Florence

Thesis: "Semantic annotation and retrieval of video content using ontologies", supervisor: Prof. A. Del Bimbo.

6 October 2006

Bachelor's Degree in Computer Engineering

University of Florence

Thesis: "Self-calibration of two cameras through the movement of people in a planar scene". Speakers: Prof. A. Del Bimbo and P. Pala.

Training or research activities

Research activity at the Ecole Nationale Supérieure des Télécommunication (ENST), Department of Signal and Image Processing (TSI), Paris, (France), from 6 April 2010 to 30 June 2010. Research under the supervision of Dr. Hichem Sahbi focused on the study and development of a visual context-dependent kernel for the recognition of advertising logos in image archives. The research activity led to the following publication: H. Sahbi, L. Ballan, G. Serra, A. Del Bimbo, "Context-Dependent Logo Matching and Recognition", IEEE Transactions on Image Processing (TIP) 22 (3), 1018-103, 2013.

Research activity at Carnegie Mellon University (CMU), Department of Advanced Multimedia Processing (AMP), Pittsburgh (U.S.A.), from October 12, 2005 to April 20, 2006. The research activity, supervised by Prof. Tsuhan Chen, focused on the study and development of a method to self-calibrate two cameras through the movement of people in a planar scene. The research activity led to the publication of the following article: T. Chen, A. Del Bimbo, F. Pernici, G. Serra, "Accurate self-calibration of two cameras by observations of a moving person on a ground plane", Proc. of IEEE Advanced Video and Signal Based Surveillance (AVSS), 2007.

Teaching activity

Note: to reduce the verbosity of the Curriculum, the courses, which have not changed over the years, have been merged together in a single line.

- Ownership of the "**Deep Learning**" Course, Master's Degree in Artificial Intelligence and Cybersecurity, University of Udine, from A.Y. 2020-2021 to A.Y. 2022-2023 (48 hours for each A.Y.)
- Ownership of the Course "Machine Learning for Big Data", Degree Course in Internet of Things, Big Data & Machine Learning, University of Udine, from A.Y. 2018-2019 to A.Y. 2022-2023 (48 hours for each A.Y.)
- Ownership of the course "**Artificial Intelligence**", Master's degree in Computer Science, University of Udine, A.Y. **2022-2023** (48 hours for each A.Y.)
- Co-responsibility of the course "Artificial Intelligence", Master's Degree in Computer Science, University of Udine, from A.Y. 2016-2017 to A.Y. 2021-2022 (16 hours for each A.Y.)
- Co-responsibility of the course "**Programming and Laboratory**", Degree Courses in Internet of Things, Big Data & Web and Computer Science, University of Udine, from A.Y. 2017-2018 to A.Y. 2021-2022 (32 hours for each A.Y)
- Co-responsibility of the course "Laboratory of Data and Multimedia Systems", Degree Course in Multimedia Sciences and Technologies, University of Udine, A.A 2017-2018 (28 hours)
- Co-responsibility of the course "Programming and Laboratory", Degree Course in Web and Multimedia
 Technologies, University of Udine, A.A 2016-2017 (24 hours)
- Co-responsibility of the course "Machine Learning", Master's Degree in Multimedia Communication and Information Technologies, University of Udine, A.A 2016-2017 (10 hours)
- Co-responsibility of the course "Multimedia Processing Systems", III year Ing. Computer Science, University of Modena and Reggio Emilia, from A.Y. 2013-2014 to A.Y. 2016-2017. (36 hours 3 ECTS each A.Y.)
- Co-responsibility of the course "Fundamentals of Computer Science and Laboratory", I year Ing.

 Elettronica, University of Modena and Reggio Emilia, from A.Y. 2015-2016 to A.Y. 2016-2017. (27 hours 3 ECTS each A.Y.)
- Holder of the course "Egocentric and Wearable Systems", Visual Computing and Multimedia
 Technologies Master (second level Master), University of Modena and Reggio Emilia, A.Y. 2015-2016
 (27 hours 3 CFU)

- Ownership of the course "Lab. Industrial **Design III"** Fundamentals of multimedia and web design III year C.d.L. in Industrial Design, Faculty of Architecture, University of Florence, **aa. 2010-2011**. (27 hours 3 CFU)
- Teaching activity to support the course "Artificial Vision and Lab" (prof. R. Cucchiara), V year ing. computer science, University of Modena and Reggio Emilia, A.Y. 2012–2013. (10 hours)
- Teaching activity to support the course "Multimedia Design and Production" (prof. A. Del Bimbo), III year ing. electronics, ing. telecommunications and ing. computer science, Faculty of Engineering, University of Florence, from A.Y. 2008–2009 to A.Y. 2011–2012. (10 hours for each A.Y)
- Teaching activity in support of the course "Multimedia Database" (prof. A. Del Bimbo), IV year ing. electronics, ing. telecommunications and ing. computer science, Faculty of Engineering, University of Florence, from A.Y. 2006-2007 to A.Y. 2011–2012. (10 hours for each A.Y.)
- Teaching activity to support the "**HTML**" course as part of the Master in Multimedia organized by the University of Florence **A.Y. 2005-2006.** (20 hours)
- Teaching activity to support the course "Computational Mink" (prof. C. Colombo), IV year ing. computer science, Faculty of Engineering, University of Florence, A.Y. 2005–2006. (10 hours)

Supervisor of more than 70 Master's and Bachelor's Degree Theses between the Universities of Udine, Modena and Reggio Emilia and Florence.

Teaching and research activities in the field of PhDs

- Board of Teachers of the PhD School "Computer Science, Mathematical and Physical Sciences",
 Department of Mathematical, Computer and Physical Sciences, University of Udine from 11-05-2017 to today
- Board of Teachers of the National PhD School in Artificial Intelligence Agrifood and Environment, administrative headquarters of the University of Naples Federico II from 01-05-2021 to today

Service Activities

- **Internationalization Delegate of** the Department of Mathematical, Computer and Physical Sciences; from 01/07/2021
- Member of the Research Commission of the Unified Council of Degree Courses in Computer Science of the Department of Mathematical, Computer and Physical Sciences; from 21 March 2018 to date.
- Member of the Internship Commission of the Unified Council of Degree Courses in Computer Science of the Department of Mathematical, Computer and Physical Sciences. From 2017 to today.
- Verbalizing Secretary of the Unified Council of Degree Courses in Computer Science of the Department of Mathematical, Computer and Physical Sciences; from February 2017 to November 2019.
- Verbalizing secretary of the Admission Competition of the PhD Course in Computer Science and Mathematical and Physical Sciences 2017 (33rd cycle) of the Department of Mathematical, Computer and Physical Sciences.
- Member of the Student Practices Commission of the Unified Council of Degree Courses in Computer Science of the Department of Mathematical, Computer and Physical Sciences.
 From 2017 to 2019.

Prizes and awards

- 2022 **Best Associate editor award** IEEE Transactions on Human-Machine Systems (IEEE THMS).
- 2022 **Joint 1st place** at the EPIC Kitchens Multi-Instance Retrieval Challenge, held within the international conference Computer Vision and Pattern Recognition (the most important world event in the field of Computer Vision).
- 2021 **Best Short paper award** with the paper, "Improving Adverse Drug Event Extraction with SpanBERT on Different Text Typologies", Proc. the International Workshop on Health Intelligence (W3PHIAI) at AAAI.
- 2021 The article "Predicting Human Eye Fixations via an LSTM-Based Saliency Attentive Model" has joined the list of 25 articles, from the IEEE Transactions on Image Processing, most downloaded in 2020. Link Research Project: http://ailab.uniud.it/2018/10/18/visual-saliency-prediction/
- 2021 **National Scientific Qualification of I Fascia** for the Competition Sector **09/H1 INFORMATION PROCESSING SYSTEMS** (valid from 14/04/2021 to 14/04/2030).
- 2017 **National Scientific Qualification of II Fascia** for the Competition Sector 01/**B1 INFORMATICS** (valid from 10/04/2017 to 10/04/2023).
- 2017 **Best Performer** of the International LSUN 2017 Saliency Prediction Challenge, held within the international conference Computer Vision and Pattern Recognition (the most important world event in the Computer Vision sector).
- 2017 **nVidia Hardware Grant**, donation of a Titan X GPU to support research activities (Commercial Value of 1300 euros)
- 2016 **nVidia Hardware Grant**, donation of a Tesla K40 GPU to support research activities (Commercial Value of 1200 euros).
- 2015 National Scientific Qualification in the 2013 session of II Fascia for the competition sector
 09/H1 INFORMATION PROCESSING SYSTEMS (valid from 23/01/2015 to 23/01/2021)
- 2015 Winner of the Best Paper Award with the scientific article "Wearable Vision for Retrieving Architectural Details in Augmented Tourist Experiences" presented at the IEEE International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN), Turin, 2015.
- 2013 Best Performance of the International competition, IMAGECLEF 2013, on automatic recognition of image content. About 40 research groups from all over the world participated in the competition. The developed system led to the following scientific publication: G
 Serra, C Grana, M Manfredi, R Cucchiara, "GOLD: Gaussians of Local Descriptors for image representation", Computer Vision and Image Understanding 134, 22-32, 2015. Link Research Project: http://ailab.uniud.it/2013/06/15/gold-gaussians-of-local-descriptors-for-image-representation/
- 2010: **Winner** of the "Flux of Meme" scholarship financed by Telecom Italia in the Working Capital initiative through a competitive call reviewed by a committee composed of personalities from both the academic and corporate worlds.
- 2010 **Winner of the Best Paper Award** with the scientific article "Tag suggestion and localization in user-generated videos based on social knowledge," presented at the ACM International Workshop on Social Media (WSM) connected to ACM Multimedia, Florence, 2010.
- 2007-2009: **Winner of MIUR scholarship** for attendance at the PhD course in Computer Engineering, Multimedia and Telecommunications, University of Florence (cycle XXII).

Coordination and participation in research projects

- **Principal Investigator**: PNRR Project for the establishment of the National Center for New Technologies in Agriculture, Agritech. Duration 3 years. Project funding: EUR 210000.
- **Principal Investigator**: "Artificial-intelligence systems applied to steel plants". Project between the University of Udine and Danieli Automation S.p.A. Duration 3 years. Value of the loan: 10000 euros.
- **Principal Investigator**: "Development of Quantum Machine Learning Techniques in industrial contexts". Research project between the University of Udine and TechStar srl. Duration 1 year and a half: Financing: 14000 euros.

- Principal Investigator: "Adverse Drug Events (ADE) Extraction" project being activated between the University of Udine and Bayer S.p.A: Duration: 1 year. The collaboration project is born also from the fact that Prof. Giuseppe Serra and his research group are actively working in This research topic and recently obtained excellent results on the reference dataset SMM4H (https://competitions.codalab.org/competitions/20798#results). Project financing: 50000 euros. Project link: http://ailab.uniud.it/2020/07/28/adverse-drug-events-ade-extraction/
- Principal Investigator: "Information retrieval and data-driven analysis in the steel production process",
 project between the University of Udine and Danieli Automation S.p.A. Duration: 2 years. Value of the loan:
 10000 euros.
- Principal Investigator: "Consulting, technical support and technical/scientific supervision on projects based on Machine Learning" project between the University of Udine and NCS-LAB SRL. Value of the Loan: 7000 euros. Project Link: http://ailab.uniud.it/2020/03/09/pathology-classification-based-limbs-kinematics/
- Principal Investigator: "Machine Learning & Data Analytics for process optimization" project between the University of Udine and SMACT is the Industry 4.0 Competence Center. Prof. Giuseppe Serra participated in a competitive call organized by SMACT on corporate projects in which all researchers from universities and research centers of the Triveneto could participate. Prof. Giuseppe Serra was the winner of a research project for the development of Machine Learning techniques for the improvement of business processes. In particular, the project has as its final objective the development of a predictive maintenance system based on Deep Learning. Value of the Loan: 51150 euros. Project Link: http://ailab.uniud.it/2020/05/07/predictive-maintenance/
- Principal Investigator: "News Reliability Assessment through Rationale and Factual Evidence", Project between the University of Udine and MIT-Boston USA. The MISTI (MIT International Science and Technology Initiatives) call supports collaborations between professors and researchers at MIT in Boston and their counterparts abroad, with the aim of fostering international cooperation, funding the mobility of the scholars involved, and subsequently promoting joint research projects. The Call is competitive and the selection is made by a group of independent professors chosen by the professors and researchers of MIT in Boston. Duration: 2019-2022. Funding value requested: 25000 euros. Project Link: http://ailab.uniud.it/2019/03/21/fake-news-detection/
- Responsible for the activities concerning Machine Learning, Deep Learning: "Training, technology transfer and supervision in the fields: Artificial Intelligence, Machine Learning, Deep Learning and Recommender System", project between the University of Udine and Previnet S.p.A.. Duration: 2019. Value of the Loan: 26000 euro
- Principal Investigator: Personalized" "Study for the Realization of a Digital Assistant based on Machine Learning and Natural Language" project proposal between the University of Udine, Tellus S.r.l. and OverIT S.r.l. Call P.O.R. FESR 2014-2020 Activity 1.3.a incentives to companies for collaborative industrial research and experimental development areas of agri-food specialization and strategic production chains. Duration: 2018-2019. Value of the loan: 50000 euros.
- **Principal Investigator: "Automatic Interpretation of Multimedia Data through Deep Learning"**, Internal call for the funding of research grants. The Call is a competitive call between all the Professors of the University of Udine. The selection takes place on the basis of the invited project proposal. The commission is composed of professors of the University itself. Duration: 2018-2019. Funding value requested: 11000 euros.
- Responsible for the activity concerning Machine Learning: "Training, technology transfer and supervision in the field of Artificial Intelligence and Machine Learning", project between the University of Udine and Previnet S.p.A.. Duration: 2017-2018. Value of the Loan: 26000 euro
- **Principal Investigator: "Machine Learning applied to clinical data analysis"** project between the University of Udine and NCS-LAB SRL. Duration: 2017. Value of the loan: 5000 euros.
- Principal Investigator: "Flux of MEME" project between the University of Florence and Telecom Italia S.p.A:
 Duration 2010-2011. Financing: 25000 euros.

 Telecom Italia, after seeing the good results obtained in the "Flux of MEME" project, has activated a collaboration with the MICC center by financing three one-year scholarships a total loan value of 65,000 euros.
- **Principal Investigator: "Social Topics and Media Analysis Tool"** project between the University of Florence and Telecom Italia S.p.A: Duration 2011-2012. Financing: 65000 euros

Participation in national, international and technology transfer research projects

- SACHER: Smart Architecture for Cultural Heritage in Emilia Romagna: Innovative BBCC interface for Cultural Industry (2016-2020). Project funded by the Emilia Romagna region. Position: Researcher

- "Vision for Augmented Experiences: from ego-vision to video personalization for the new digital culture"
 (2014-2016) Project between the University of Modena and Reggio Emilia and Fondazione Cassa di Risparmio di Modena. Position: Researcher
- PON R&C: "The DICET-INMOTO project and O.C.H.E.S.T.R.A: innovation for the sustainable development of the territory" (2012-2015), in which large companies participate: ENGINEERING S.p.A., Expert System S.p.A., Open1 S.r.l.

Position: Researcher.

- EU IST: "Interactive semantic video search with a large thesaurus of machine-learned audio-visual concepts" (EU IST FP6-045547 VidiVideo, 2007-2010).

Position: Researcher.

- MIUR (Ministry of Education, University and Research) FIRB: "VIVIT: VIVI ITALIANO" (MIUR FIRB, 2009-2011).
 Position: Researcher.
- MIUR (Ministry of Education, University and Research) FIRB: "Computerized Archive of Testimonies of
 Artistic and Literary Culture in manuscript funds between the nineteenth and twentieth centuries: from
 Cavalcaselle to Brandi" (MIUR FIRB, 2009-2011).

Role: Scientific Head of Unit.

- Regional funding for research projects: " Mathematical Modelling of Geothermal Systems for the definition of decision tools to be used in the control procedures of Geothermal concessions" (MAC-GEO, 2009-2010). Position: Researcher.
- "Development of advanced video surveillance systems", project between the University of Florence and Thales Group S.p.A. Duration 2008-2010. **Role:** Researcher and developer.
- MIUR (Ministry of Education, University and Research) PRIN: " **FREE Surveillance in a pRivacy-respectFul way"** (MIUR PRIN FreeSurf, 2007-2010). **Position**: Researcher.
- EU IST SME: "Immersive Multimedia Interfaces" IM3I (EU IST FP7-222267, 2008-2010) in which Italian and European companies participated: IN2 search interfaces development Ltd United Kingdom (SME); Spring Techno Germany (SME); NEOS Sistemi S.r.l. Italy (SME). Position: Researcher.

Invited reports

- "Working with Text Data", International Summer School on Artificial Intelligence Al-DLDA, 2018, 2019, 2020, 2021, 2022.
- "Artificial Intelligence and Applications", Udine 3D Forum, 2018 and 2020.
- "Riemannian Manifolds and Tangent Spaces: Application to Human Activity Recognition", Roma Tre University, 16 January 2018
- "Machine Learning: Text and Image Understanding", Department of Humanities and Cultural Heritage, University of Udine, 11 December 2017
- "Effective Codebooks for Human Action Representation and Classification in Unconstrained Videos", Computer Vision & Pattern Recognition Laboratory, University of Naples Parthenope, 11 July 2012.
- "Multimedia Ontologies for video annotation" University of Cagliari, 18-20 May 2008.

Experience gained in the field of research and / or teaching

Associate and Guest Editor

- **Editorial Board Member, IEEE** Transactions on Human-Machine Systems (IEEE THMS), from 12/02/2017 to 31/12/2022
- **Editorial Board Member,** ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), from 12/02/2017 to present
- Lead Guest Editor: Special Issue on "Wearable and Ego-vision Systems for Augmented Experience" on IEEE Transactions on Human-Machine Systems. 2015-2016
- Lead Guest Editor: Special Issue on "Multimedia for Cultural Heritage" on Multimedia
 Tools and Applications an International Journal, 2015-2016

Proposer and organizer:

- 2nd European Summer School on Quantum AI (EQAI), 27/05/2023 01/06/2023, Udine, Italy.
- 1st European Summer School on Quantum AI (EQAI), 12-16/09/2022, Udine, Italy.
- 17th Italian Research Conference on Digital Libraries (IRCDL), 18-19/02/2021, Udine,
 Italy.
- 14th Italian Research Conference on Digital Libraries (IRCDL), 25-26/01/2018, Udine, Italy.

Co-organizer Workshop:

- Video and Image Question Answering: building a bridge between visual content analysis and reasoning on textual data, connected to the IEEE International Conference on Pattern Recognition (ICPR), 10/01/2021, Milan, Italy.
- IEEE International Workshop on Egocentric, Perception, Interaction and Computing (EPIC), connected to the IEEE International Conference on Computer Vision (ECCV), 09/09/2018, Munich, Germany.
- IEEE International Workshop on Egocentric, Perception, Interaction and Computing (EPIC), connected to the IEEE International Conference on Computer Vision (ICCV), 29/10/2017, Venice, Italy.
- IEEE International Workshop on Egocentric, Perception, Interaction and Computing (EPIC), linked to the IEEE European Conference on Computer Vision (ECCV), 8/10/2016, Amsterdam, Netherlands.
- IEEE International Workshop on Wearable and Ego-vision Systems for Augmented Experience, connected to the IEEE International Conference on Multimedia and Expo (ICME), 3/07/2015, Turin, Italy.
- IEEE International Workshop on Multimedia for Cultural Heritage, connected to the International Conference on Image Analysis and Processing (ICIAP), 9/09/2013, Naples, Italy.

Co-organizer of the tutorial:

- "The Bag of Visual Words model and recent advancements in image classification", linked to the International Conference on Computer Analysis of Images and Patterns, 1/09/2015, Valletta, Malta.
- "Recent advancements on the Bag of Visual Words model for image classification and concept detection", linked to the International Conference on Pattern Recognition (ICPR), 24/8/2014, Stockholm, Sweden.

Program, Area and Session Chair

- Program Chair: 22nd International Conference on Image Analysis and Processing (ICIAP), 11-15/09/2023.
- Sponsorship Chairs: 21st International Conference of the Italian Association for Artificial Intelligence (AIxIA 2022), 28 November 2 December 2022
- Area Chair (Document and Media Analysis): 25th International Conference on Pattern Recognition

(ICPR), 10-15 January 2021.

- Session Chair: International Conference on Natural Language Processing (ICNLP 2021),
 26-28 March 2021, Beijing, China.
- Session Chair: Italian Research Conference on Digital Libraries (IRCDL), 30-31 January 2020, Bari, Italy.
- Session Chair: International Conference on Similarity Search and Applications (SISAP),
 2-4 October

2013, A Coruña, Spain.

Local Technical Committee member of the international conferences: ACM Multimedia 2010, 25-29 October 2010, Florence (Italy) and European Conference on Computer Vision 2012, 7-13 October 2012, Florence (Italy).

Reviewer for International Journals:

- IEEE Transactions on Multimedia (from 2009)
- IEEE Transactions on Image Processing (from 2015)
- IEEE Transactions on Information Forensics and Security (TIFS), (from 2013)
- IEEE Transactions on Circuits and Systems for Video Technology (from 2009)
- Computer Vision and Image Understanding (from 2007)
- Pattern Recognition (from 2008)
- Pattern Recognition Letters (from 2007)
- IEEE Multimedia (from 2007)
- IEEE Internet of Things Journal(from 2015)
- Int'l Journal of Multimedia Information Retrieval (MMIR) (from 2014)

- ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM) (form 2007)
- Signal Processing: Image Communication Elsevier (from 2010)
- Eurasip Journal on Image and Video Processing (from 2008)
- Pattern Analysis and Applications (from 2006)
- Multimedia Tools and Applications (from 2006)

Member of the Board of Directors of the II level International University Master in Visual Computing and Multimedia Technologies, 2015, University of Modena and Reggio Emilia.

Project reviewer

- Reviewer for European Research Council (ERC) Starting Grant proposals 2020 Research Area: Deep Learning and Computer Vision 2020
- Project reviewer for Dutch Research Council, Domain Science (ENW) Research Area:
 Deep Learning 2020

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14/04/2023