Prof. Paolo Ciuccarelli

Full professor | Northeastern University, Boston (US)
College of Arts Media and Design
Founding Director | Center for Design

CV

Born on October 4, 1971, I graduated with a Master's in Architecture from the Politecnico di Milano in 1996. During my studies, I spent nine months at the *Institut d'Arts Visuels (IAV)* in Orléans, France, where I deepened my interest in communication, visual languages, and art. There, I also engaged in courses on architecture, urban planning, photography, and landscape design. Upon returning to the Politecnico, I sought out coursework that integrated design and communication within the Architecture program. One highlight was a seminar led by Armando Testa, an influential figure in the Italian and international advertising industry. His agency remains a benchmark in communication design and was a key influence in my early career.

After earning my degree in 1996, I began research collaborations with the Department of Technology and Architecture at Politecnico di Milano and co-founded a design agency with six classmates. We offered a wide range of design services, from photography and graphic design to web design, interiors, and architecture. A few years later, four of us launched a spin-off agency dedicated entirely to digital and visual communication, aligning with the high demand for branding and identity work generated by the early 2000s tech boom.

Around this time, professors Alberto Seassaro and Tomas Maldonado were laying the groundwork for a Design program within Politecnico's School of Architecture, the first university-level program in design in Italy. I was invited to participate in this pioneering endeavor and, recognizing its significance, committed fully to the project. The program grew exponentially, with enrollment reaching over 4,000 students and leading me to fully devote my career to academia.

After several years as a contract professor teaching Design and ICT (Information and Communication Technologies), during which I published in this area, I was appointed Assistant Professor in 2001 and joined Politecnico full-time. In 2006, I was promoted to Associate Professor, and in 2014, I received national qualification as a Full Professor in Italy. Throughout my academic career, I have focused on the role of information design and data visualization in making complex issues visible, understandable, and actionable for diverse stakeholders, with the goal of fostering informed, impactful decision-making.

In 2018, I secured a Full Professor position at the Department of Art and Design, College of Arts, Media, and Design, at Northeastern University in Boston, and I relocated in 2019 to establish the Center for Design. At Northeastern, I have expanded my research beyond visual transformations to explore other modalities such as data sonification and data physicalization, reconnecting with my architectural and product design background. In recent years, I have also collaborated on research examining the influence of emerging technologies, such as Artificial Intelligence, on design processes, revisiting my initial research focus on meta-design.

As a first project at the Center for Design (2019-2020), I curated "Curating Curation: A Visual Atlas of the Curatorial Process" for the pavilion "The Eyes of the City" at the Bi-City Biennale of Architecture/Urbanism in Shenzhen, RPC.

The three most pivotal milestones in my career at Politecnico and Northeastern include:

- Launching the DesignNet Initiative within the Design Department at Politecnico di Milano, focused on developing tools and methods for managing information and knowledge in design processes. The resulting tools (Design Catalogue, Design Thesaurus, and Design Directory) were piloted for several years within POLIteca, the Design Knowledge Center at Politecnico di Milano, which I founded and directed until 2011. POLIteca has since been integrated into the university library system.
- Founding the DensityDesign Research Lab—formally recognized as a departmental lab in 2010—where I served as Scientific Director. DensityDesign's research emphasizes the visual representation of complex social, organizational, and urban phenomena. The lab's work spans theoretical and epistemological explorations of visualization and the development of custom visualization frameworks and speculative exploration tools. Today, the lab continues its research at the intersection of data visualization, media studies, and social impact.
- Establishing the Center for Design at Northeastern, an interdisciplinary research platform. The Center serves as a collaborative space and hub, connecting actors in the design ecosystem. It aims to share knowledge and practices, develop common tools and methodologies, and foster a unified disciplinary foundation. Over five years, the Center has grown into a highly active, interdisciplinary group with an impressive research record and frequent events that engage both Northeastern's design community and the broader Boston area.

At the current stage of my career, I've come to realize that my primary strength and passion lie in building organizations focused on design research—creating the conditions for others to explore, innovate, and excel in design research in the true spirit of meta-design.

Education and Employment

1990-1996 Master of Science in Architecture at Politecnico di Milano.

Subject of the thesis: the relationship between technical facilities and the shape of modern architecture.

1996-2004 Co-Founder

"Settenomidiversi" and "Bizquit", Communication Design and Architecture agencies

1999 - 2001

Lab Technical Director — full time

Department of Industrial Design and Technology of Architecture - Politecnico di Milano

2001/09/01 - 2006/28/2

Assistant Professor – *full time*

Department of Design - Politecnico di Milano

2006/03/01 - 2019/3/15

Associate Professor – *full time*

Department of Design - Politecnico di Milano

2019/04/08 -

Full Professor – <u>full time</u>

Department of Art + Design, College of Arts, Media and Design – Northeastern University, Boston (USA)

Director – *full time*

Center for Design, College of Arts, Media and Design - Northeastern University, Boston (USA)

I've been regularly teaching since 1999 in Design programs, both in the Bachelor (Undergraduates) and Master (Graduates) levels, moving from Product Design to Communication Design, and eventually to Design Research Methods and Information Design, that I claim to be my main field of research nowadays.

Scholarship | publication

Peer reviewed articles

- Lindborg, P., Caiola, V., Ciuccarelli, P., Manni, C., & Lenzi, S. Re(de)fining sonification: Project classification strategies in the Data Sonification Archive. *Journal of the Audio Engineering Society*, 72(9), 1-18. https://doi.org/10.17743/jaes.2022.0167
- 2021 Ciuccarelli, P. A Design Macroscope: Tools and Platforms to Foster Interdisciplinary Design Research. DIID—Disegno Industriale Industrial Design, (75), 8. https://doi.org/10.30682/diid7521c.
- **2020** Lenzi, S., & Ciuccarelli, P. Intentionality and design in the data sonification of social issues. *Big Data & Society*, 7(2). DOI:10.1177/2053951720944603.
 - Colombo, S., & Ciuccarelli, P. Design for Emergency: An Open Platform to Design and Implement User-Centered Solutions in the COVID-19 Pandemic. *Strategic Design Research Journal*, 13(3), 711–724.
- 2018 Bortoletti, F., Gobbo, B., Elli, T., Gerbino, G. and Ciuccarelli, P. Venezia, la "festa mobile" per un atlante in fieri, *La Rivista di Engramma*, 169, 11/2018, 47-88 https://doi.org/10.25432/1826-901X/2018.160.0006.
- 2017 Colombo, G., Ciuccarelli, P., Mauri, M. Visual Geolocations. Repurposing online data to design alternative views. pp.1-9. In Big Data & Society vol. 4 (1). ISSN:2053-9517.
 DOI:10.1177/2053951717702409.
 - Mauri, M., Pini, A. and Ciuccarelli, P. *Designing diagrams for Wikipedia* in Information Design Journal, 23, 65-79 DOI: http://dx.doi.org/10.1075/idj.23.1.08mau
- **2014** Ciuccarelli, P. *Mind the Graph: From Visualization to Collaborative Network Constructions*. Leonardo Journal 47.3: 268-269 MIT Press Journals.

Conference proceedings

- 2024 Lenzi S, Terenghi G, Meacci D, Moreno Fernandez-de-Leceta A and Ciuccarelli P (2024) The design of Datascapes: toward a design framework for sonification for anomaly detection in Alsupported networked environments. *Front. Comput. Sci.* 5:1254678. https://doi.org/10.3389/fcomp.2023.1254678.
 - Gray, C. M., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., and Lloyd, P. (eds.) *DRS2024: Boston*, 24-28 June, Boston, United States, Design Research Society. https://doi.org/10.21606/drs.2024.cv001.
 - Lenzi, S., Ciuccarelli, P., & Offenhuber, D. Towards A Definition of Autographic Sonifications: Listening as An Act of Knowledge, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.729.
 - Holmes, J., Blanco, M., Linkner, T., Ciliotta Chehade, E., & Ciuccarelli, P. Harnessing Information Visualization as A Vehicle for Translational Design, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.664.
 - Ciliotta Chehade, E. et al. Mapping Patient-Centered Design Practices and Actors Within Stakeholder Networks To Reimagine Healthcare, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.629.

- Lenzi, S., & Ciuccarelli, P. Designing Tools for Designers: The Data Sonification Canvas, in Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., Lloyd, P. (eds.), *DRS2024: Boston*, 23–28 June, Boston, USA. https://doi.org/10.21606/drs.2024.730.
- Bruggeman, R., Ciliotta Chehade, E., Marion, T. J, & Ciuccarelli, P. Towards a Computational Model of Abstraction in Design Reasoning. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46. Retrieved from https://escholarship.org/uc/item/17197716.
- 2023 Colombo, S., Ciliotta, E., Marengo, L., Liu, H., Molino, P., & Ciuccarelli, P. Design for Emergency: How Digital Technologies Enabled an Open Design Platform to Respond To COVID-19. *Interacting With Computers*, 35(5), 650-665.
 - Han, Y., Bruggeman, R., Peper, J., Ciliotta Chehade, E., Marion, T., & Ciuccarelli, P. Extracting Latent Needs from Online Reviews Through Deep Learning-Based Language Model. In *Proceedings of the Design Society*, 3, 1855-1864.
 - Bruggeman, R., Ciliotta Chehade, E., & Ciuccarelli, P. Expanding User Need Finding Through Abductive Reasoning, in *Proceedings of the Design Society*, 3, 1745-1754.
 - Maffei, S., Bianchini, M., Villari, B., Ciliotta Chehade, E., Seitz, U., & Mages, M. A. Exploring patient-centeredness ecosystems: A collaborative approach to expand the service design horizon. In SERVDES 2023: Entanglements and Flows Service Encounters and Meanings, 620-638.
- 2022 Kim, M., Mages, M. A., Maffei, S., Ciuccarelli, P., & Villari, B. (2022). Empowering Patientship. In 11th Inclusive Design Conference, Helen Hamlyn Centre for Design.
 - Lenzi, S., Sádaba, J., and Ciuccarelli, P. A Designerly Approach to The Sonification Of Electric Vehicles, in Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.), *DRS2022: Bilbao*, 25 June 3 July, Bilbao, Spain. https://doi.org/10.21606/drs.2022.499.
 - Ciuccarelli, P., Felde, N., Pangaro, P., & Barbero, S. Meta-Design in The Complexity of Global Challengesin Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.), *DRS2022: Bilbao*, 25 June 3 July, Bilbao, Spain. https://doi.org/10.21606/drs.2022.1076.
 - Chen, G., Ciuccarelli, P., & Colombo, S. VisualBubble: Exploring How Reflection-Oriented User Experiences Affect Users' Awareness of Their Exposure to Misinformation on Social Media. *CHI Conference on Human Factors in Computing Systems Extended Abstracts*, 1–7.
 - Kim, M., Mages, M. A., Maffei, S., Ciuccarelli, P., Villari, B., & Bianchini, M. Empowering Patientship. 11th Inclusive Design Conference, Helen Hamlyn Centre for Design Conference Proceedings, 90.
 - Lenzi, S., & Ciuccarelli, P. Sonifying data, taking action on climate change: A review of cases from the Data Sonification Archive. In *Proceedings of the Conference on Data Art for Climate Action (DACA2022)* (pp. 21–26). Hong Kong. Retrieved from http://dataclimate.org/
- **2021** Lenzi, S., Ciuccarelli, P., Liu, H., & Hua, Y. Data Sonification Archive.
 - Ciuccarelli, P., & Kahn, P. From scientific visualization to public engagement: Learning from a public archive of COVID-19 related visualizations. In *AA. VV. Malofiej 28: Premios Internacionales de Infografía* (pp. 6-12). Society for News Design; EUNSA (Ediciones Universidad de Navarra).
 - Arnaboldi, M., Brambilla, M., Cassottana, B., Ciuccarelli, P., Ripamonti, D., Vantini, S., & Volonterio, R. (2021). Studying multicultural diversity of cities and neighborhoods through social media language detection. *Proceedings of the International AAAI Conference on Web and Social Media*, 10 (2), 2–7. https://doi.org/10.1609/icwsm.v10i2.14825
- 2020 Invernizzi, M., Mauri, M., & Ciuccarelli, P. Visual monitoring of complex algorithms. 2nd Edition

- of the International Design Conference 2CO COmmunicating COmplexity, 115–120. Universidad de La Laguna.
- 2019 Mauri, M., Colombo, G., Angeles, B., Ciuccarelli, P., & Others. Teaching the critical role of designers in the data society: the DensityDesign approach. *Fifth International Conference for Design Education Researchers*, 183–195. METU Department of Industrial Design.
 - Sara, L., Riccardo, T. G. T., Stefano, G., Paolo, C., & Others. Disclosing cyber-attacks on water distribution systems. An experimental approach to the sonification of threats and anomalous data. *Sonification for Everyday Life: Proceedings of the 25th Annual International Conference on Auditory Display*, 125–132. "Best use of Sound Award" for the above-mentioned paper: http://j.mp/sonification_award.
- 2017 De Rossi G. and Ciuccarelli P. *Mapping Communication Design through the Web*. In Proceedings of IASDR 2017 Re: Research: 7th International Congress of the International Association of Societies of Design Research, University of Cincinnati, US doi:10.7945/C2CH5V
- 2016 Borra E., Weltevrede E., Ciuccarelli P., Kaltenbrunner A., Laniado D., Magni G., Mauri M., Rogers R., Venturini T. *Contropedia the analysis and visualization of controversies in Wikipedia articles*. In Proceedings of The International Symposium on Open Collaboration (OpenSym'14). ACM, New York, NY, USA, Pages 34, 1 pages. http://doi.acm.org/10.1145/2641580.2641622.
 - Mauri, M., and Ciuccarelli, P. Designing diagrams for social issues, in Lloyd, P. and Bohemia, E. (eds.), *Future Focused Thinking DRS International Conference 2016*, 27 30 June, Brighton, United Kingdom. https://doi.org/10.21606/drs.2016.185.
 - Antonelli F., Azzi M., Balduini M., Ciuccarelli P., Della Valle E., Larcher R. *City sensing: visualising mobile and social data about a city scale event*. In Proceedings of the 2014 International Working Conference on Advanced Visual Interfaces (AVI '14). ACM, New York, NY, USA, 337-338. http://doi.acm.org/10.1145/2598153.2600032
 - Balduini, M. Della Valle, E. Azzi, M. Larcher, R. Antonelli F. and Ciuccarelli P. "CitySensing: Fusing City Data for Visual Storytelling," in *IEEE MultiMedia*, vol. 22, no. 3, pp. 44-53, July-Sept. 2015, doi: 10.1109/MMUL.2015.54.
 - Caviglia, G., Ciuccarelli, P., Coleman, N. *Communication Design and Digital Humanities. Visualizations and Interfaces for Humanities Research*. In Diversity: design/humanities.

 Proceedings of the fourth International Forum for Design as a Process. September 19-22, Belo Horizonte-MG, Brazil. EdUEMG (Editora da Universidade do Estado de Minas Gerais). ISBN 978-85-62578-33-5.
- **2015** Borra E., Weltevrede E., Ciuccarelli P., Kaltenbrunner A., Laniado D., Magni G., Mauri M., Rogers R., Venturini T. *Societal Controversies in Wikipedia Articles*. CHI'15: 33rd Annual ACM Conference on Human Factors in Computing Systems Proceedings.
- 2013 Mauri M., Pini A., Ciminieri D., Ciuccarelli P. Weaving data, slicing views: a design approach to creating visual access for digital archival collections. In Proceedings of the Biannual Conference of the Italian Chapter of SIGCHI (CHItaly '13). ACM, New York, NY, USA, , Article 21, 8 pages. http://doi.acm.org/10.1145/2499149.2499159.
 - Uboldi, G., Caviglia, G., Coleman, N., Heymann, S., Mantegari, G., Ciuccarelli, P. *Knot: an Interface for the Study of Social Networks in the Humanities*. In Proceedings of the Biannual Conference of the Italian Chapter of SIGCHI (CHItaly '13). ACM, New York, NY, USA, Article 15, 9 pages. http://dl.acm.org/citation.cfm?id=2499174.
 - Pellegrini, V., Caviglia, G., Ciuccarelli, P. Minerva: an Information Visualization Tool to Support

- *Philosophical Historiography*. In Ceccarelli, N. (ed.), 2CO Communicating Complexity Conference Proceedings, August 2013. Alghero, Italy. Edizioni Nuova Cultura, Roma. ISBN 9788868121952, doi: 10.4458/1662
- **2012** Trocchianesi R. and Ciuccarelli P. *Iconology as a matter of design between information visualization and artistic approach*. In Diversity: Design/Humanities. Belo Horizonte, 19-22 Sept., p. 55-3, Belo Horizonte: Barbacena, MG: EdUEMG, ISBN: 9788562578151
- 2011 Roveta F., Di Mario L., Maggi F., Caviglia G., Zanero S., Ciuccarelli P. BURN: baring unknown rogue networks. In Proceedings of the 8th International Symposium on Visualization for Cyber Security (VizSec '11). ACM, New York, NY, USA, Article 6, 10 pages http://doi.acm.org/10.1145/2016904.2016910 [Best Paper Award]
- 2010 Masud L., Valsecchi F., Ciuccarelli P., Ricci D., Caviglia G. From Data to Knowledge.
 Visualizations as transformation processes within the Data-Information-Knowledge continuum.
 Proceedings of Information Visualisation (IV), 2010 14th International Conference. 445 449. 26-29 July 2010, London, United Kingdom.
- **2009** Valsecchi F., Ciuccarelli P. *Ethnographic approach to design knowledge. Dialogue and participation as discovery tools within complex knowledge contexts*. In IASDR '09 Rigor and Relevance in design. p. 3517-3531, Seoul, South Corea, 18-22 Oct. ISBN: 9788996319405
- **2008** Ciuccarelli P., Ricci D., Valsecchi F. *Handling changes trough diagrams: Scale and grain in the visual representation of Complex Systems*. In Changing the Change Proceedings, ed. Cipolla C., Peruccio P.P. Turin: Allemandi, July 10
- **2007** Baule G., Ciuccarelli P., Ricci D., Scagnetti G. *Reshaping Communication Design Tools. Complex Systems structural features for Design Tools*. IASDR'07 Proceedings: International Associations of Societies of Design Research, Hong Kong, 12-15 Nov. ISBN: 9789889910143
 - Ciuccarelli P., Valsecchi F. *Network Shapes Design Activities. ICT Supporting Open and Shared Design Processes.* In IASDR'07: International Associations of Societies of Design Research. Hong Kong, 12-15 Nov. ISBN: 9789889910143
- **2004** Ciuccarelli P., Innocenti P., Vidari F. *POLI.teca: a Design Knowledge Centre at Politecnico di Milano. A Physical Interface to Networked Knowledge*. In: Work With Computing Systems 2004 Proceedings of the 7th International Conference on Work with Computing Systems. 29 June 2 July 2004. (pp. 170-175). ISBN/ISSN: 983-41742-0-9. KUALA LUMPUR: Damai Sciences Sdn Bhd (MALAYSIA)
- 2002 Ciuccarelli P., Innocenti P., Vidari F., Boghetich M. DesignNet: a online knowledge gateway for industrial design education and research activities. VSMM'02—Creative Digital Culture-8th International Conference on Virtual Systems and Multimedia. 25-27 Sept. pp. 353-361.
 Gyeongyu, Korea.
 - BoghetichM., Ciuccarelli P., Innocenti P., Vidari F. *Anonline knowledge gateway for industrial design education and research activities*. In Proceedings of the '02 international conference on Dublin core and metadata applications: Metadata for e-communities: supporting diversity and convergence (DCMI '02). Dublin Core Metadata Initiative 197-198.

<u>Books</u>

2016 Ciuccarelli P., Lupi G., Simeone L. Visualizing the Data City. Social Media as a Source of Knowledge for Urban Planning and Management. Springer Briefs in Applied Sciences and Technology, Springer Publishing Company, Incorporated ISBN: 331902194X 9783319021942

Book chapters

- 2023 Marion, T. J., Moghaddam, M., Ciuccarelli, P., & Wang, L. Al For User-Centered New Product Development: From Large-Scale Need Elicitation to Generative Design. In *The PDMA Handbook on Innovation and New Product Development* (7). ISBN: 978-1-119-89021-8.
- 2019 Ciuccarelli, P. Digital Humanities and (Communication) Design United. In Reassembling the Republic of Letters in the Digital Age. Standards, Systems, Scholarship (pp. 299–307). Göttingen University Press.
- 2018 Bach B., Stefaner M., Boy J., Drucker S., Bartram L., Wood J., Ciuccarelli P., Engelhardt Y., Köppen U. and Tversky B. *Narrative Design Patterns for Data-Driven Storytelling*, edited by Riche N.H., Hurter C., Diakopoulos N., Carpendale S., CRC Press Taylor & Francis Group, ISBN 978-1-138-19710-7
- 2016 Gray, J., Bounegru, L., Milan, S. and Ciuccarelli, P. Ways of Seeing Data: Toward a Critical Literacy for Data Visualizations as Research Objects and Research Devices. pp.227-251. In Innovative Methods in Media and Communication Research ISBN:978-3-319-40699-2.
 DOI:10.1007/978-3-319-40700-5 12
- 2012 Ciuccarelli P. *Visual Explorations. On-line Investigations for Understanding Society.* In Errea J., Gil A. in Malofiej 19. International Infographics Awards. (pp. 6- 23)

Ciuccarelli P. *Turning Visualisations into Stories and "Big Pictures.* In Rendgen S., Wiedermann J. *Information Graphics*. p. 77-95, Cologne: Taschen GmbH, ISBN: 9783836528795

The research achievements and the design work of DensityDesign Lab have been featured in several international design books, as (among the others): »A Map of the World. The World According to Illustrators and Storytellers« (2013), »Cause and Effect. Visualizing Sustainability« (2012), »Data Flow 2« (2010), »Visual Storytelling« (2011) all published by Gestalten; »Understanding the World. The Atlas of Infographics« (2014), »Information Graphics« (2011) both published by Taschen; »Visual Complexity« (2011) published by Princeton Architectural Press.

SCHOLARSHIP | RESEARCH

- **2020** -- Senior Affiliate member, <u>metaLAB at Harvard</u>, Harvard University (MA,US).
- **2020-2023** Affiliate member, Roux Institute, Northeastern University, Portland (ME,US).
- 2017-2020 Research Fellow at ISI Foundation Institute for Scientific Interchange to "collaborate on scientific problems that span across disciplines (math, physics, biology, social sciences, humanities) in the pursuit of breaking new grounds at the forefront of complex systems and network science, data and computational science, information technologies, computational epidemiology & public health, and statistical physics" https://www.isi.it/en/news- events/meet-the-isi-fellows-2017-
- 2016 Invited member for the Dagstuhl Seminar »Data-Driven Storytelling« http://www.dagstuhl.de/en/program/calendar/semhp/?semnr=16061
- 2015-18 leader of the Data Visualization Working Group (WG6) within the COST Action "Reassembling the Republic of Letters" coordinated by Oxford University.

 http://www.cost.eu/COST Actions/isch/Actions/IS1310 http://www.republicofletters.net/.
- 2014-- Co-Editor of »Big Data & Society« journal SAGE Publications http://bds.sagepub.com/
- **2014** Member of the Expert Panel for evaluation of research projects at *Research Foundation Flanders (FWO)* http://www.fwo.be/en/fellowships-funding/research-projects/
- **2011** Scientific Institutional Partner e Reviewer of International Journal of McLuhan Studies http://www.mcluhanstudies.com/
- **2011** Evaluation Counselor for The MacArthur Fellows Program MacArthur Foundation, Chicago (IL, US) http://www.macfound.org/programs/fellows/
- 2010-12 Tutor of EU-Science and Technology Fellowship Program China, Intake2 Research project: »Communication Strategies for Sustainable Social Innovation. The Design Approach to Systemic Knowledge and Living Heritages«
- 2010-- Project Affiliate in the »Mapping the Republic of Letters« initiative, launched in 2008 and coordinated by Stanford Humanities Centre, CA, USA: (https://republicofletters.stanford.edu/)
- 2010 -- Scientific Coordinator at DensityDesign Research Lab (http://densitydesign.org/people/)
- 2006--Foundation of DensityDesign Research Lab (http://densitydesign.org/)

Member of the board at the Design PhD program (Politecnico di Milano) and chair of the PhD course "Public Engagement with Science and Technology", my research activity focuses on the development of tools and methods for Data Visualization and Information Design to foster understanding and support decision-making processes in complex (social) systems/issues.

Member of the first board at the Interdisciplinary Design and Media PhD, activated by the College of Arts, Media and Design in 2021. At the PhD I also taught the first edition of the foundational course "Design Research Methods".

In 2010 the DensityDesign Research Lab signed a framework research agreement with the MediaLab of SciencePo University (Paris) – scientific director prof. Bruno Latour – to develop tools and methods for the visual exploration of web contents, in the framework of the Cartography of Controversies project. It represented a very important milestone for our engagement with social sciences and humanistic disciplines.

TEACHING

- **2024** ARTG 2242 Information Design Principles, NU Boston, first time teaching.
- **2023** Experience and Interaction (NCHNUAH484M) at NCH/NU London two sections (2 days per week), newly designed and executed.
- 2022 INAM7001 Research Methods in Interdisciplinary Design and Media, designed in fall 2021 for the interdisciplinary PhD program.
 - ARTG 6100 Information Design Studio 2
 - Designed the Experience and Interaction course at NCH/NU London campus.
- **2021** Designed and started the INAM7001 course (*Research Methods in Interdisciplinary Design and Media*) for the new interdisciplinary PhD program (execution postponed to Spring 2022).
 - ARTG 3451 Information Design 1 (studio), A+D Dept, Northeastern University.
- **2020** ARTG 7990 MFA Thesis (significantly redesigned course for COVID), A+D Dept., Northeastern University.
 - ARTG 6330 Information Design Mapping Strategies, A+D Dept., Northeastern University.
- **2019** ARTG 3451 *Information Design 1* (studio), A+D Dept, Northeastern University.
- **2016-2019** Member of the board of the "DataShack" Design + Computer Science joint initiative (Politecnico di Milano + Harvard University Institute for Applied Computer Science IACS) http://datashack.deib.polimi.it/
- **2009**-- Chair of the course "Going Public. Public Engagement with Science and Technology" at the PhD School– Politecnico di Milano
 - **30** hours, **7** lectures
 - About 20 students from all the PhDs programs of Politecnico di Milano
- 2002-2019 Chair of the studio-based course "Laboratorio di Metaprogetto" (*Metadesign Studio*), 2nd year, B.Sc. Communication Design—Politecnico di Milano (*topics: branding and metadesign*) <u>6</u> credits | <u>60</u> hours per semester (4 to 8 hours per week)

 About 50 students every year
- 2002-2019 Chair of the seminar cycle "The Design System" (with the Metadesign Studio), 2nd year, B.Sc.
 Communication Design Politecnico di Milano (topics: branding and metadesign)
 3 credits | 24 hours per semester (4 hours for 6 weeks)
 - About **150** students every year
- 2004-2019 Chair of the Final-Synthesis Studio, 2nd year, M.Sc. Communication Design –

Politecnico di Milano (topics: Data and Information Visualization for Understanding Complexity) - http://www.densitydesign.org/teaching/
6 credits | 60 hours per semester (4 to 8 hours per week) About 40 students every year

I've been invited as visiting lecturer at the Royal College of Arts (UK), Glasgow School of Art (UK), GSD at Harvard (MA, US), MIT Media Lab (MA, US), Universidad de Malaga (E), ENSCI Les Ateliers (F), The Royal Institute of Art – School of Architecture (SW), the British Higher School of Art and Design in Moscow (RUS), the Stanford Humanities Centre (CA, U.S.) and the China Central Academy for Fine Arts (CAFA), Beijing (RPC) – among others. I've been teaching to several Master Programs in other universities and programs, fostering the integration of the design culture and methods in disciplines as Management, Business Intelligence, Computer Science, Statistics, Data Science, Communication Studies.

GRANTS

- 2024 NSF SBIR Award, through the spinout ADA IQ, based on the NSF grant #2050052
- **2023** -- »Advanced Design Augmentation (ADA) Through AI for Socially-Aware Product Design«, Impact Engine, internal, Northeastern University, Boston.
- »DataViz + AI«, Impact Group, internal, College of Arts, Media, and Design (and Khoury College of Computer Science), Northeastern University, Boston.
 »Design for Social Change«, Impact Group, internal, College of Arts, Media and Design, Northeastern University, Boston (extended).
- **2022** [Spring] »AI Technologies for Need Finding, Concept Evaluation, and Generative Design«, Spark Fund (CRI), internal, Northeastern University, Boston.
- 2021-- »Collaborative Research: From User Reviews to User-Centered Generative Design: Automated Methods for Augmented Designer Performance« Award Abstract # 2050052 funded by NSF, the National Science Foundation, US (36 months extended). »Information filtering in social media and formation of misbeliefs« Tier 1 grant, funded by the College of Arts, Media and Design the role of UX and UI in the spread of misinformation | 36 months.
- **2017-2020** »Atlante Calvino« a visual atlas of Calvino's opera funded by funded by the Swiss National Science Foundation Switzerland (*30 months*).
- **2017-2019** »POLIscope« funded by the Office of the Rector at Politecnico Di Milano understanding and communicating internal data through six perspectives: who we are, internationalization, research and teaching projects, students' journeys, alumni.
- **2017-18** »Switzerland's Institutional Landscapes 1933–1980« funded by the Independent Expert Commission (IEC) of the Swiss Federal Council Switzerland (*12 months*) https://www.uek-administrative-versorgungen.ch/interactivereport/en/.
- **2015-17** »Milano Hub« funded by the Office of the Rector at Politecnico Di Milano understanding the role of Milano through both structured-statistical and non-structured-social media data (24 months).
- »[FIRE] Fighting Illicit Firearms Trafficking Routes and Actors at European Level« funded by EU 7th Framework Program (24 months).
 »CitySensing« + »CityDataFusion« EIT-ICT Labs, funded by EU 7th Framework Program (12 months).
- **2012-13** »Telltale. Urban Digital Footprints« funded by the Design Department at Politecnico di Milano–analyzing the social media layer in the urban area of Milano (24 months).
- **2012** »Geomedia. Observatory of International Geomediatic Flows« funded by Agence Nationale de la Recherche France (36 months) https://geomedia.hypotheses.org/.
- 2011-14 »EMAPS. Electronic Maps to Assist Public Science « EU 7 th Framework Program Collaborative Projects, SiS.2011.3.0.6-1 Science-Society interaction in the digital technologies era program with Fondation Nationale des Sciences Politiques (Sciences Po), F; University of Amsterdam UvA, NL; Institute of Spatial Planning, University of Dortmund

- TUDo, D; Barcelona Media BM, E; The Young Foundation, UK. (36 months).
- 2013 »The Law Factory« funded by Institutions-Citizens Partnership (PICRI) Region Île-de-France (F) (5 months) - http://www.lafabriquedelaloi.fr/.
 - »Contropedia. Real time analysis and visualization of controversies around Wikipedia articles« in the frame of the Network of Excellence in Internet Sciences (EINS), funded by 7FP EU (12 months) http://contropedia.net/.
- **2009-10** »Urban School Needs Map« coordinated by Iridescent Learning, funded by the Office for Naval Research (ONR) and National Science Foundation (NSF) Informal Science Education Grant (*24 months*).
- **2004-05** »EMUDE. Emerging User Demands for Sustainable Solutions« EU 6th Framework Program (*24 months*).

SPONSORED RESEARCH PROJECTS

- **2020-2024** Banca Intesa Milano (I), data visualization for HR management and optimization of internal processes.
- **2018** Accenture Milano (I), a concept for an immersive data visualization platform for collaborative visual analysis.
- **2017** ISI Global Foundation NYC (USA), »JARVIS« (a visual tool to explore the behavior of topic modeling algorithms).
- **2017-18** ContactLab SpA Milano (I), »RAWGraphs community development« sponsorship.
- **2015-16** Il Sole 24ORE SpA Milano (I), supporting DensityDesign Research.
- **2015** Besteam ScPa Milano (I), »Sphaera. Data and Information Visualization« (visual dashboard).
- 2015 University of Oxford UK, »COST Action 1S1310: Reassembling the Republic of Letters« (Design and development of the visual identity and the web management platform).
- 2014-15 Orange Sa Paris (F), »Orange API Toolbox« (visual exploration of mobile-phone data).
- **2014-15** Triennale Di Milano Milano (I), »Expo Gate Visual Storytelling« (a series of 6 data-based motion graphics as trailers for the universal exposition).
- **2013-14** World Health Organization (WHO) Geneva (CH), »Cartography of Controversies« (a visual analysis through the web to understand the public debates and perception of health-related issues and WHO positions on that).
- **2014** Telecom Italia Trento (I), »Dashboard Big Data Mashup« (a dashboard for policy makers for the analysis of mobile-phone and social media data).
- **2013** Stanford University Stanford (CA, U.S.), »Athanasius Work Plan« (*development of visual tools for scholars in Digital Humanities*).
- **2013** Telecom Italia Trento (I), »Big Data Mashup« (*integration of mobile-phone data and social media data*).
- **2012-13** Fineco Bank Spa Milano (I), »Visual Models for Financial Personal Data«.

- **2012** Egis Concept/Elioth Paris (F), »ReForMe« (a visual application to show the flows of energy in Paris).
- **2012** ShiftN cvba Heverlee (B) »SVEN Development Of Discursive Maps Of The Flemish Sustainable Materials Management Arena« (design and development of a visual tool for the visual analysis of a corpus of texts related to waste management issues).
- **2011-12** IEO European Institute of Oncology Milano (I), »Smart Food«.
- **2011-12** RCS Mediagroup SpA Corriere della Sera Milano (I), »La Lettura Visual Data«.
- **2010-11** Comitato Italia150 Milano (I), »Stazione Futuro« (six visualizations to celebrate the birth of Italian Republic).
- **2010-11** Expo2015 Milano (I), »Feeding the Planet, Energy for Life« (*Visualizing the Complexity of the Theme for Expo2015*).
- **2011** CSI Piemonte Torino (I), » Data Storytelling « (two web apps to visualize Open Data).
- **2010** SEI SpA Milano (I), (Data and Information Visualization for the facilities at Saline Ioniche).
- **2009** CONTACT LAB Milano (I), (Interactive Data Visualization for Email management)

SERVICE (major roles)

- **2021** -- Member of the Board, Interdisciplinary Design and Media, PhD, College of Arts, Media and Design, Northeaster University, Boston, US.
- 2019 -- Founding director, Center for Design, Northeaster University, Boston, US.
- **2012-2018** Chair of the B.Sc. and the M.Sc. programs in Communication Design at Politecnico di Milano, Italy.
- **2006-2017** Member of the Board of the PhD in Design at Politecnico di Milano, Italy.
- 2004-2016 Coordinator for Politecnico di Milano in the Master of European Design http://www.masterofeuropeandesign.com/
- **2003-2011** Scientific Director at *POLIteca Design Knowledge Center*, Politecnico di Milano

Reviewers of articles and papers at international journals and conferences, such as: BigData and Society (SAGE), DH (Digital Humanities), IEEE VIS, CHI, Design Research Society (DRS) and more.

PHD THESIS ADVISOR

year of discussion

ongoing Ryan Bruggeman, on Design and AI

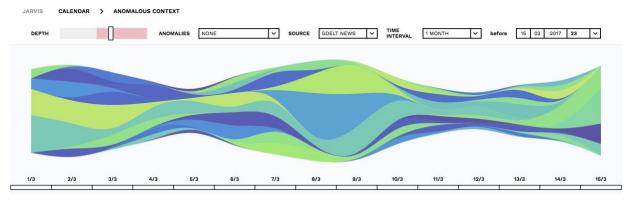
ongoing Skye Moret, on Information Design for Climate Change

- **2021** Sara Lenzi, *The design of data sonification. Design processes, protocols and tools grounded in anomaly detection* (Politecnico di Milano, external advisor)
- **2019** Angeles Briones, *The role of Data Visualization in Social Innovation and Grass-roots initiatives* [cum laude]
- **2018** Gabriele Colombo, *The Design of Composite Images. Displaying Digital Visual Content for Social Research*
- **2016** Azzurra Pini, Redesigning organizational processes.
- **2015** Michele Mauri, *Design of the un-finished. Information visualization in mapping social issues through the web* (external examiner: prof. Richard Rogers, UvA)
- **2014** Giorgia Lupi, Visualizing the user generated city: exploring the potentiality of emergent geo-social media applications as a novel source of urban knowledge (external examiner: prof. Andrew Vande Moere, KU Leuven)
- **2013** Giorgio Caviglia, *The design of heuristic practices. Rethinking communication design in the digital humanities* (external examiner: prof. Giovanna Ceserani, Stanford Humanities Center)
- **2012** Luigi Farrauto, *The Image of the City: Jerusalem and the Stratification of Sense* (external examiner: prof. Carlo Ratti, SENSEable City Lab MIT)
- **2010** Donato Ricci, Seeing What They Are Saying. Diagrams for Socio-Technical Controversies
- **2009** Francesca Valsecchi, *Collaborative Design Knowledge: networks as a model for shared creative activities*

Master thesis in Communication Design tutor (more than 80 thesis tutored)

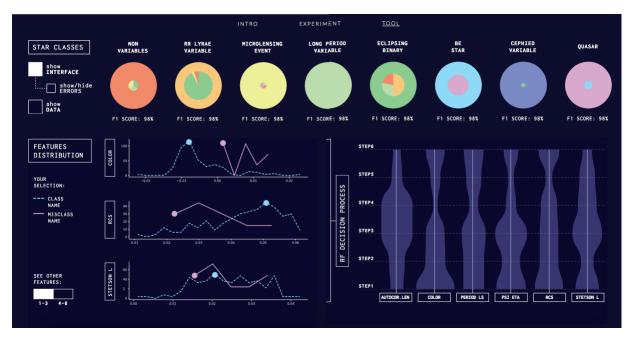
A selection of the most relevant works (and key topic/discipline involved)

- 2024 Jacopo Conti,
- **2023** Muxing Chen, MFA Candidate, IDDV Program, *The Whole Is Other Than the Sum of Its Parts: A framework for classifying and deconstructing composite visualization*, discussed in April 2023, submitted April 19, 2024.
- **2018** Beatrice Gobbo, *Topic Tomographies. Visual Models to Support Dynamic and Hierarchical Topic Modeling*



As digital platforms become more and more pervasive in individuals everyday-life, mining information from media streams is a popular strategy to make sense of social debates, customer sentiment and rumor spreading. A large body of work has been developed by researchers in different fields to devise actionable pipelines and effective visualizations to automatize knowledge extraction from unstructured corpora. However, tuning the optimal information aggregation level for spotting anomalous behaviors in sub- streams of the overall discussion, is still a challenging task. In this paper we present TopTom, a platform whose goal is to provide the user with an interactive visual analytics tool to explore a dynamic corpus of user-generated messages and media articles, with the aim of i) distilling the information from thousands of documents in a low-dimensional space of explainable topics, ii) drilling down to details and stories as constituents of the topics, iii) spotting trends and anomalies. TopTom implements an analytic pipeline able to extract main keywords from an heterogeneous corpus, identify topics over time and cluster them in a hierarchical fashion, both from streaming sources in near-real time and from historical data with a temporal dimension in a cold start mode. The resulting output unfolds along three main axis: time, volume and similarity (i.e. topic aggregation). To allow the browsing of data in a multi-scale fashion and the identification of anomalous behaviors, three visual metaphors were adopted from biological and medical fields to design visualizations, i.e. the flowing of particles in a coherent stream, tomographic cross sectioning and contrast-like analysis of biological tissues. The platform interface is composed by three main visualizations with coherent and smooth navigation interactions: calendar view, flow view, and temporal cut view. The first one provides a global overview allowing the user to see when anomalous behaviors arose and acts as entry point. The second one allows the user to visualize the evolution of topics in time by exploring different levels of aggregation and temporal scales. The third one shows the keywords composing each topic and the similarity between them, at a given time. The integration of these three visual models with the multi-scale analytic pipeline proposes a novel system for the identification and exploration of topics from unstructured texts. We evaluated the system using a collection of documents about the emerging opioid epidemics in the United States

Giulia Zerbini, *Designing Visual Features For Appropriate Reliance In Human-Machine Interactions* - co-tutored by Prof. Pavlos Protopapas - IACS Harvard



The aim of this project is to investigate the concept of reliance applied to human-machine interactions, and to propose a principled method for measuring as well as optimizing reliance through a combination of machine learning and visualization design. The idea is to create a closed-loop process of data collection (applying principles of experimental design and game theory), analysis and modeling (machine learning) and interactive data visualizations (design). The objective of the research is to use this process to create visualizations that optimize the level of reliance of the users in human-algorithm pairings by allowing the users to understand the algorithm through investigation. The goal of this research is to apply reliance optimized visualization designs in real use-cases.

- 2017 Nicoletta Bruno, Immigration and fear between communication and perception -
- **2015** Viola Bernacchi, *Gender imbalance and Wikipedia. Visualize gender issues in the Web using Digital Methods*.
- 2014 Federica Fragapane, A visual exploration of the Mafia in the North of Italy. Data Visualization as a support tool for understanding criminal organizations featured here:
 http://www.storybench.org/how-federica-fragapane-visualized-organized-crime-in-northern-italy/ (Digital Humanities, Computational Linguistic)

Giulio Fagiolini. *The big picture. A visual exploration of the reciprocal image of Italy and China observed through the lens of digital methods* - featured here: http://visualoop.com/29518/cool- interactive-experiments-of-2014 - (Digital Methods, Computational Sociology)

Giovanni Magni, *Borders. A geo-political atlas of the movie industry* - http://j.mp/1DrXner
Maria Luisa Bertazzoni, *SHINE. Shaping Innovation Networks* (Business Process Modeling)

2013 Martina Elisa Cecchi, *Visualizing controversies in Wikipedia*. The case of Family Planning - http://j.mp/1DrYkTO (Digital Humanities, Computational Sociology, Digital Methods)

Benedetta Signaroldi, *The Role of Design in the Cartography of Controversies* (STS, Computational Sociology)

Tommaso Renzini, Hashtlas. A cultural map of Milano through the digital traces (Social Media

Data)

Valerio Pellegrini, *Minerva. Data Visualization to support the interpretation of Kant opera* (Digital Humanities)

Giorgio Uboldi, *Knot. Visual interfaces to explore social networks in historical research* (Digital Humanities)

Back in **2004** I tutored the first thesis at Politecnico di Milano discussing about the role of Design in Data and Information Visualization: Daniele Galiffa, *From Information Visualization to Information Visual Handling: the KMAP project*.

HONORS, AWARDS, JURIES

- **2024** »ADI Design Index«, chair of the jury for the *Communication Design* section.
- 2022 Honorable Mention Compasso d'Oro Award, XXVII edition *Atlante Calvino ("Calvino Atlas")*. Literature And Visualization https://www.polimi.it/en/articles/compasso-doro-2022-winners-from-the-politecnico-di-milano
- **2019** »Information is Beautiful Award«, member of the <u>Jury</u>.
- 2017 The work "On Their Way: the Journey of Foreign Fighters" designed by five students of the Final Synthesis Studio I coordinate gets a **gold** in the "Current Affairs & Politics. Works on news, politics, finance & economics" category at Kantar Information is Beautiful Award https://www.informationisbeautifulawards.com/showcase/2323
- 2016 The IEEE MultiMedia paper entitled: "City Sensing: Fusing City Data for Visual Storytelling" has been selected as the winner of the "2016 IEEE Multimedia <u>Best Paper Award</u>" by the IEEE MultiMedia Editorial Board. Authors: Balduini M., Della Valle E., Ciuccarelli P., Azzi M., Larcher R. and Antonelli F.
- 2014 RAW from DensityDesign Research Lab - gets a gold in the "Tool" category and the "Most Beautiful" award at Kantar Information is Beautiful Award <u>j.mp/RAW Award</u>
- **2011-12** Gold and Bronze medals in *Features Portfolio* and *Science, Technology, Medical and Health Issues* at *Malofiej International Infographics Award*, XIX XX ed. Pamplona
- **2011** »DRM. Design Research Maps« awarded with *Compasso d'Oro*, XXII ed., ADI Industrial Design Association

Honorable mention at *Lucky Strike Talented Designers Award* – Raymond Loewy Foundation - as tutor of the Master Thesis »Tunescape«

The paper entitled: "BURN: baring unknown rogue networks" has been selected as the winner of the **Best Paper Award** at VizSec 2011. Authors: Roveta F., Di Mario L., Maggi F., Caviglia G., Zanero S., Ciuccarelli P.

»Malofjei 19 Infographics Award« (the 'Pulitzer of Infographics'), member of the Jury.

2008 Honorable mention at *Compasso d'Oro* Award, XXI ed., ADI - Industrial Design Association, with the research project »EMUDE. Emerging User Demands for Sustainable Solutions«

TALKS AND LECTURES

2024 "Designing Design Algorithms", The European Conference on Computer Vision (ECCV'24), FashionAI workshop, Milano, September 30th, 2024

"Design beyond Design. Value, Approaches, Responsibilities", *Italian Design Days*, Consulate General of Italy, Boston, March 15th, 2024

"Data Visualization and Systemic Design", within the Service Design for Systemic Change Master, POLIdesign, Politecnico di Milano (guest lecture, online).

Lecture at the Ottoline Club series, NU London: "Information Design and Digital Humanities".

"Data, Algorithms and Design", within the Data-driven Service Design Master, POLIdesign, Politecnico di Milano (guest lecture, online).

"Design and AI", in the Design Theory and Practice course, Harvard Business School, (guest lecture, online).

"GenAl in Design", within the Master in Strategic Design for Innovation and Transformation, Politecnico di Milano School of Management (guest lecture, online).

"Complex Data Visualization and Design for Storytelling" at <u>Visualization in Science and Education</u>, "Visualizing Complex Systems", Gordon Research Conference — Bates College, Lewiston, ME, US.

Keynote speech at European University Association / Council for Doctoral Education, "Engaged research - the role of communication in doctoral education", jointly hosted by University of Technology and University of Helsinki 14-16 June 2023 | Lahti, Finland.

"Charting the territory of design for sound-based data experiences", presentation at the <u>Information+</u> conference, Edinburgh, UK.

"Data in Communication Design" within the Master "Art & Copy" – Politecnico di Milano (guest lecture, online).

"Design and Data - perspectives", in the Design Theory and Practice course, Harvard Business School (guest lecture, online).

"Designing with Data", in the course Design Perspectives, prof. Lee Moreau (guest lecture).

Presentation of the Data Sonification Archive at IEEE VIS Spotlight "Audio-Visual Analytics", Oklahoma City.

Designing with Data and Information in the Age of Emergency, keynote at "Datarama. Dataviz, reveler et mesurer l'urgence", Ecole de Design Nantes Atlantique.

"Sonifying data, taking action on Climate Change: a review of cases from the Data Sonification Archive" at DACA 2022 – Data Art for Climate Action, Hong Kong.

Beyond the Visual. Hearing Data between Science and Emotion, public event on Data Sonification at MEET – Digital Culture Center, Milano (I).

"The Data Sonification Archive and the Sonification of COVID-19", talk at the Data Visualization Society's "Outlier" Conference.

2021 "Lectio Magistralis" within the Master Art and Copy – Politecnico di Milano (guest lecture).

"Within and beyond. How data and design can articulate urban complexity" – Open

Systems course, Master in Systemic Design, Politecnico di Torino (guest lecture, online).

"Data Humanism", in the Artificial Intelligence in Contemporary Design Practice seminar, GSD Harvard (guest lecture).

"Designing Data", DIDA Research Week Digital, PhD School, Universita' di Firenze (guest lecture, online).

"Encounters. A journey across (many) disciplines", Information Design Lecture Series, Universita' La Sapienza, Roma (guest lecture, online).

"On Design Research", Design PhD, Politecnico di Milano (guest lecture, online).

"Design and Data - perspectives", in the Design Theory and Practice course, Harvard (guest lecture, online).

"Data Rhetoric" at NUVis Visualization Consortium (Northeastern University), Invited Speaker Series (guest lecture).

"Data Embodiment. The human in the loop", in 2CO Educational – Information Design Intro.

Invited to keynote as "thought leader" at the 2020 EAD (European Academy of Design)'s "Safe Harbours" Conference – title: "Experimenting with Humans and Numbers".

The meta-design series presented at the DRS Festival of Emergence.

Design for Emergency at CHEAD Annual Conference, UK.

2020 "Designing in the Emergency" at IV Congreso Internacional Investigación Diseño.

"Humanising Data", Graduate School of Design (GSD) Harvard, "Al seminar" (guest lecture).

"Visualizing Complex Data: COVID-19 & More" (with Paul Kahn), <u>Seminar</u> with Design Museum Everywhere Foundation.

2019 S-H-O-W Conference 2019 "Emotions in data visualizations and information design" - Utrecht, NL

XXII International Exhibition of La Triennale di Milano / China Pavillon Public Symposium – "The Complicated Urban Environment" - Milano, IT.

DATA Initiative – Inaugural Data Forum "Using Analytics to Drive Growth": https://damore-mckim.northeastern.edu/events/1st-annual-data-forum/.

2018 »NetSci2018« - Paris, F – https://www.netsci2018.com/social-dinner

»Designing Civic Consciousness« - Università di San Marino - http://dcc.unirsm.sm/

»Congreso Futuro« - Santiago, Chile – https://www.congresofuturo.cl/

»VisDatos« - Santiago, Chile - https://visdatos.cl/

2017 »Futureland« - Milano, IT - https://www.futureland.co/

»New Perspectives in the Digital Humanities - Thinking with pictures « - King's College London, UK - http://newperspectivesdh.com/

»Frontiers of Interaction« - Milano, IT - https://www.frontiersconf.com/

»Visualized« - Milano, IT - http://visualized.com/milan/

»INCH-INfographic CHanges«-Munich, DE-http://2017.edch-conference.com/en/speakers

»DTL Conference 2017« - Barcelona, S - http://datatransparencylab.org/dtl-2017/





2016 »Eyeo« - Minneapolis, MN -http://eyeofestival.com/speakers/

»Data Transparency Lab Conference 2016« - Columbia University, NYC, US-http://datatransparencylab.org/dtl-2016/



2015 »Information + Visualization Series« - Potsdam University of Applied Sciences (D)http://infovis.fh-potsdam.de/

»Data Transparency Lab Conference 2015« - MIT MediaLab, Cambridge, UShttp://datatransparencylab.org/dtl-2015/ **2014** »Beyond Data Visualization: (Communication) Design Tactics to Embrace Complexity« at *Conference of European Statistics Stakeholders* – Rome (I)

»Engage Today to Shape Tomorrow« – European Commission, Brussels (B) – http://j.mp/1FtfzUx

»Open Data Visualization« at *Raw Open Data* – Instituto Pedro Nunez, Coimbra (P) – http://rawopendata.ipn.pt/

»Beyond Visualization. Designing meaning through data (visual) experiences« at *Show me* the Data! – University of Amsterdam (NL) – http://j.mp/1LRka78





2014 »Logo as Method. Building the Identity of Big Data and Society Journal« at Big Data Practices. Panel with the Journal Editorial Team, Big Data & Society (SAGE), The Design & Social Science Seminar Series 2013-14, Goldsmiths University, London (UK) - http://www.gold.ac.uk/csisp/events/csispevents2013-2014/

2013 »Data, Design and Society. From Visualization to Action« at *FAST FORWARD. Design Practice and Education in the Near Future* – Glasgow School of Arts

»Arts, Humanities, and Complex Networks« - 4th Leonardo Satellite Symposium at NetSci2013, Copenhagen (DK) [Keynote Speaker] - http://artshumanities.netsci2013.net/

»The Future of (Information) Design. A Romance of Many Dimensions« at *The Future of Design*, Frog Design, Milano (I)

»Design + Humanities. (Re)thinking Communication Design in the Digital Humanities« at Digital Humanities: Current state and Future challenges, Fondazione Bruno Kessler (FBK), Trento (I) - http://dh.fbk.eu/events/dh-workshop-memory-emanuele-pianta

2012 »Designing Data Experiences: from flatland to interaction and engagement« at *Interactive Beijing*, Beijing (P.R.C.) -

»Macroscopes. Designing Visual Tools to Help People Understand and Make Sense of Complex Phenomena« at ENSCI Les Atelier – Paris (F)

»Visual Explorations for Design Research«, internal presentation, IDEO, Munich (D)

»Why Design + Humanities?« at *Early Modern Time and Network*, a Humanities + Design Research Workshop, Stanford Humanities Center

2011 »The Aesthetic of Conversations« at *Malofjei 19 World Infographic Summit*, Universitad de Navarra, Pamplona (E) - http://www.snd-e.com/malofiej/cumbre/2011



»Visualizing Uncertainty«, Stanford University (CA, USA)

»Visualizing for Understanding. The design perspective« at *Mapping the Republic of Letters Conference + Meeting*, Giorgio Cini Foundation, Venezia (I)

2009 TEDx Lake Como, 1st Italian ed. of TED Conference, Como (I)



EXHIBITIONS (works by DensityDesign Lab)

2012 »GeoCity-SmartCity« at China Millennium Monument Museum of Digital Arts (CMoDA), Beijing – RPC, Sept-Oct

»The Art of Networks« at Foosaner Art Museum, Florida Institute of Technology in the frame of CompleNet 2012.3rd Workshop on Complex Networks, Mar.-http://j.mp/TRGJMz

»ExpoViz« at Campus des Cordeliers, Paris (F) - http://expoviz.fr/exposition

2011 »1906-2015: verso Expo Milano« at Triennale di Milano (I), Feb.