Curriculum Vitae Pedro M. Cruz 193 Ryder Hall

Associate Prof. 360 Huntington Ave. Northeastern Univ. Boston, MA 02115

pmcruz.com

### **Education**

- 2010-16 Ph.D. Doctoral Program in Information Science and Technology, University of Coimbra., Portugal. Dissertation: *Semantic Figurative Metaphors in Information Visualization*. With distinction and honor.
- 2005-10 Master of Science (M.S.) and Bachelor of Science (B.S.) in Informatics Engineering, University of Coimbra, Portugal. Thesis: *Information Visualization towards information aesthetics*. GPA 18/20.

# **Employment**

- 2023- Associate Professor, Department of Art+Design, College of Arts Media and Design (CAMD), Northeastern University.
- 2016-23 Assistant Professor, Department of Art+Design, College of Arts Media and Design (CAMD), Northeastern University.
- 2016 Visiting Assistant Professor, Department of Art+Design, CAMD, Northeastern University.
- 2008-15 Freelancer, FBA. Studio, Coimbra.
- 2010-15 Part-time Invited Assistant Professor, Department of Informatics Engineering, Faculty of Sciences and Technology, University of Coimbra.
- 2010-15 Research Student, Computational Design and Visualization Lab, Cognitive and Media Systems Group, Centre for Informatics and Systems, University of Coimbra.
- 2015 Part-time Lecturer, Porto Business School.
- 2011-12 Visiting PhD student, Senseable City Lab, Massachusetts Institute of Technology.
- 2012 Research assistant, Singapore-MIT Alliance for Research and Technology.
- 2009-10 Teaching Assistant, Department of Informatics Engineering, Faculty of Sciences and Technology, University of Coimbra.

# **Publications**

# **Book Chapters**

- Wihbey, J., Jackson, S., Cruz, P., and Welles, B., "Visualizing Diversity: Data Deficiencies and Semiotic Strategies." In *Data Visualization in Society*, edited by Helen Kennedy and Martin Engebretsen, Amsterdam University Press, 2020. EQUAL CONTRIBUTION
- Cruz, P., and Machado, P. "City Portraits and Caricatures." In *Decoding the City: How Big Data Can Change Urbanism*, edited by Dietmar Offenhuber and Carlo Ratti, pp. 96–109, Birkhauser Verlag AG, 2014. [PRINCIPAL CONTRIBUTION]

# Peer-Reviewed Journal Articles

- Cruz, P., Wihbey, J., Ghael, J., Shibuya, F., and Costa, S., 2019. Dendrochronology of U.S. immigration. *Information Design Journal*, 25(1), pp. 6-20. PRINCIPAL CONTRIBUTION
- Cruz, P. and Machado, P., 2016. Pulsing Blood Vessels: A Figurative Approach to Traffic Visualization. *IEEE Computer Graphics and Applications*, 36(2), pp. 16–21. [PRINCIPAL CONTRIBUTION]
- Cruz, P. and Machado, P., 2015. Contiguous animated edge-based cartograms for traffic visualization. *IEEE Computer Graphics and Applications*, 35(5), pp. 6–13. PRINCIPAL CONTRIBUTION
- Cruz, P. and Machado, P., 2011. Generative Storytelling for Information Visualization. *IEEE Computer Graphics and Applications*, 31(2), pp. 80–85. [PRINCIPAL CONTRIBUTION]

### Peer-Reviewed Articles in Conference Proceedings

- Cruz, P., Wihbey, J., Ghael, J., Costa, S., Chao, R., and Shibuya, F., 2018. Process of simulating tree rings for immigration in the U.S. In Annotated Projects of IEEE VIS Arts Program (VISAP). Berlin, 16 pages. PRINCIPAL CONTRIBUTION
- Cruz, P., 2017. Adapted Dorling Cartogram on Wage Inequality in Portugal. In Proceedings of the IEEE VIS Arts Program (VISAP). Phoenix AZ, Article 1. PRINCIPAL CONTRIBUTION
- Polisciuc, E., Maçãs, C., Machado, Cruz, P. and Amaro, H., 2016. Flow map of products transported among warehouses and supermarkets in Portugal. In IVAPP: International Conference on Information Visualization Theory and Applications. Rome, pp. 177-186. [SECONDARY CONTRIBUTION]
- Maçãs, C., Polisciuc, E., Machado, Cruz, P. and Amaro, H., 2016. Iso-Edges for the Geo-Representation of Consumptions. In IVAPP. Rome, pp. 220-227. [SECONDARY CONTRIBUTION]
- Cruz, P., 2015. Wrongfully right: applications of semantic figurative metaphors in information visualization. In IEEE VIS Arts Program. Chicago, pp. 14-21. PRINCIPAL CONTRIBUTION
- Maçãs, C., Cruz, P. et al., 2015. Swarm systems in the visualization of consumption patterns. In IJCAI'15 International Conference on Artificial Intelligence. Buenos Aires, pp. 2466-2472.
- Polisciuc, E., Cruz, P. et al. 2015. Arc and Swarm-Based Representations of Customer's Flows Among Supermarkets. In IVAPP. Berlin, pp. 300-306. EQUAL CONTRIBUTION
- Maçãs, C., Cruz, P. et al. 2015. Time-Series Application on Big Data: Visualization of Consumption in Supermarkets. In IVAPP. Berlin, pp. 239-246. [EQUAL CONTRIBUTION]
- Cruz, P., Costa, C. and Machado, P., 2014. An Ecosystem of Corporate Politicians. In xCoAx Computation, Communication, Aesthetics and X. Porto, pp. 146-156. PRINCIPAL CONTRIBUTION
- Cruz, P., and Machado, P., 2010. Visualizing the Portuguese Empire Expansion and Decline. In ARTECH: 5th International Conference on Digital Arts, Guimarães, pp. 65-71. PRINCIPAL CONTRIBUTION

# Peer-Reviewed Abstracts in Conference Proceedings

- Cruz, P. and Cunha, A., 2018. An ego-altruist society. In Proceedings of the Joint Symposium on Computational Aesthetics and Sketch-Based Interfaces and Modeling and Non-Photorealistic Animation and Rendering (Expressive '18), Vancouver, BC. ACM, New York, NY, article 18, 2 pages. Principal Contribution
- De la Torre-Arenas, I. and Cruz, P., 2017. A taxonomy of motion applications in data visualization. In Proceedings of the Joint Symposium on Computational Aesthetics and Sketch Based Interfaces and Modeling and Non-Photorealistic Animation and Rendering (Expressive '17), Los Angeles, CA. ACM, New York, NY, article 7, 2 pages.

- Kamolov, R., Machado, P., and Cruz, P., 2013. Musical Flocks. In ACM SIGGRAPH 2013 Posters, Anaheim, p. 93. MINOR CONTRIBUTION
- Kamolov, R., Machado P., and Cruz, P., 2013. Visualizing the Flow of Users on a Wireless Network. In ACM SIGGRAPH 2013 Posters, Anaheim, p. 114. [MINOR CONTRIBUTION]
- Cruz, P., and Machado, P., 2011. Visualizing the Circulatory Problems of Lisbon. In ACM SIGGRAPH 2011 Posters, Vancouver, p. 92. PRINCIPAL CONTRIBUTION
- Duro, L., Cruz P., and Machado, P., 2011. Abstract Ocean Waves. In ACM SIGGRAPH 2011 Posters, Vancouver, p. 11. EQUAL CONTRIBUTION
- Cruz, P., and Machado, P., 2010. Visualizing Empires Decline. In ACM SIGGRAPH 2010 Posters, Los Angeles, p. 154. [PRINCIPAL CONTRIBUTION]

#### Other

- Velho, A., Cruz, P., Banks-Richardson, D., Armin, G., Zhang, Y., Inomura, K., Zolotovsky K. 2023. Interactive Visualization of Plankton – Mediated Nutrient Cycling in the Narragansett Bay. In Proceedings of the OCEANS Gulf Coast.
- Cruz, P. and Wihbey, J., 2018. 200 Years of U.S. Immigration Looks Like the Rings of a Tree. National Geographic. Online here. Principal Contribution
- Wihbey, J., Beaudet, M., and Cruz, P., 2017. There are huge holes in how the U.S. states investigate politicians' conflicts of interest. Washington Post/Monkey Cage. Online here. [SECONDARY CONTRIBUTION]
- Cruz, P., Robinson P., and Ratti, C., 2012. Deciphering the Signature of Humanity. Ericsson Business Review, 2, pp. 50-51. PRINCIPAL CONTRIBUTION
- Cruz, P., Robinson, P., and Ratti, C., 2012. The Signature of Humanity. Ericsson Traffic and Market Report, 6, pp. 25-26. [PRINCIPAL CONTRIBUTION]
- Cruz, P., Machado, P., and Bicker, J., 2010. Visualización del Tráfico en Lisboa. Mediateca Expandida. Habitar, LABoral Centro de Arte y Creación Cultural, pp. 86-87. PRINCIPAL CONTRIBUTION

#### **Presentations**

#### Conferences, symposia, and colloquia

- Outlier Conference, Data Visualization Society, May 4, Porto. Presentation: Visualization: it's natural!
- 2019 National Convening Integration of the Arts, Humanities and STEMM in Higher Education, National Academy of Sciences, April 12, Washington DC. Panel and presentation: CAMD & Humanics, research and the Co-Lab for Data Impact.
- 2018 IEEE VIS Arts Program, Estrel Hotel & Congress Center, October 24, Berlin. Paper presentation: Process of simulating tree rings for immigration in the U.S. Peer REVIEWED
- Information+ conference, University of Applied Sciences Potsdam (FH Potsdam), October 21, Potsdam. Presentation: Simulated dendrochronology of immigrants and natural-borns in the United States, showing the fifty states (1790–2016). PEER REVIEWED
- Numerical Existence symposium, Oi Futuro Museum of Telecommunications, September 19, Rio de Janeiro. Panel: Creative Processes in Data Visualization.
- A2RU Arts in the Public Sphere: Civility, Advocacy, and Engagement, Northeastern University, November 2, Boston. Chaired and presented in the panel: The Roles of Information Design in the Public Sphere.

- IEEE VIS Arts Program, Phoenix Convention Center, October 4, Phoenix. Paper presentation: Adapted Dorling Cartogram on Wage Inequality in Portugal.
- 2016 Indexical Design A symposium on the experience of information and materiality of data, Fenway Center, June 25, Boston. Presentation: UN/BIASED.
- 2015 IEEE VIS Arts Program, Palmer House Hotel, October 28, Chicaco. Paper presentation: Wrongfully right: An exploration of figurative metaphors in visualization.
- Zer0 the future of knowledge-intensive based art, Municipal Library of Tavira,
   September 5, Tavira, Portugal. Presentation: Semantic figurative metaphors in visualization.
- 2014 xCoAx Conference on Computation, Communication, Aesthetics and X, Almeida Garrett Library, February 26, Porto. Paper presentation: An Ecosystem of Corporate Politicians.
- 2013 Interaction South America'13, IxDA, November 14, Recife. Lecture: Portraits, Visualization, Information.
- SIGGRAPH International Conference and Exhibition on Computer Graphics and Interactive Techniques, Los Angeles Convention Center, July 29, Los Angeles. Student Research Competition Finalists' presentation: Visualizing Empires Decline.
- ARTECH: International Conference on Digital Arts, School of Architecture, University of Minho, April 22, Guimarães, Portugal. Paper presentation: Visualizing the Portuguese Empire Expansion and Decline.
- International colloquium: Image in Science and Art, Calouste Gulbenkian Foundation, February
   18, Lisbon. Lecture: Visualization of complexity: expressiveness and accuracy.

### Festivals and exhibitions

- Naturalizing Immigration exhibition, West Village H, Northeastern University, November 14, Boston. Artist talk at the opening.
- 2017 FACTT New York Trans-Disciplinary & Trans-National Festival of Art & Science, SVA Bio Art Lab, October 1, New York. Artist talk: Still Moving Life.
- 2014 Ibero-American Biennial of Design, Central de Diseño de Matadero, November 26, Madrid. Awarded work presentation: An Ecosystem of Corporate Politicians.
- Festival CCP, Creatives' Club of Portugal, ETIC School of Technology, Innovation and Creation.
   May 16, Lisbon. Presentation: Metaphors and visualization.
- 2011 Conversations in Design+Multimedia, Science Museum, May 3, Coimbra. Presentation: My work and my path.

#### Labs, corporations, educational, and internal

- 2023 MIT Senseable City Lab, Cambridge, April 12. Presentation of work.
- Human by Design: Center for Design Launch, Northeastern University East Village, January 28, Boston. Presentation: Design + Journalism: the Co-Lab for Data Impact.
- 2019 Data Stories Podcast, April 3. Panel presentation and interview: Simulated Dendrochronology of U.S. Immigration.
- PUB Boston Brazilian University Researchers, Cambridge Innovation Center, February 22,
   Cambridge. Lecture: Visualizing U.S. immigration as tree rings.
- Data Empowerment Speaker Series, Data Experience Lab + Innovation in Visualization Lab,
   University of Calgary, January 31, Calgary. Lecture: Simulation and visualization: metaphor and adventure!

- Graduate Science Policy Group, What's Poppin', Northeastern University, January 25, Boston. Workshop: Designing your data.
- NULab + NUVis panel What is the story? Curry Student Center, Northeastern University, October 11, Boston. Presentation: Data-driven generative storytelling.
- Massachusetts Institute of Technology, April 20. MIT 4.032/4.033 Design Studio: Information and Visualization. Lecture: Metaphors in information visualization..
- 2017 CAMD Research Collaborative: New Directions for Design & Data Storytelling, Northeastern University, November 30, Boston. Project presentation: Population flows and identity in the U.S.
- Viacom, Data Science team, May 8, New York. Presentation: New Urban Living Rooms new techniques and methods to visualize and experience media data in the age of non-linear mobile viewership.
- CAMD Welcome Day, Northeastern University, March 8, Boston. Presentation: visualization and storytelling.
- 2016 The Broad Institute, May 26, Boston. Presentation: Semantic Figurative Metaphors in Information Visualization.
- 2014 médialab (Sciences Po), IFRIS (ESIEE Paris) for the Seminar on data, digital methods and mapping social complexity, ENSCI, May 15, Paris. Lecture: Storytelling, metaphors and visualization.
- 2013 Interaction South America'13, IxDA, November 14, Recife. Workshop: Using physics to design computationally.
- Polytechnic Institute of Cávado and Ave, September 27, Barcelos. Lecture: Portraits and caricatures in information visualization.
- Laboratory of Visuality and Visualization, Fine Arts School, Federal University of Rio de Janeiro,
   July 17, Rio de Janeiro. Lecture: Exploring portraits and caricatures in information visualization.
- Transparency Hackday, Maus Hábitos, February 22, Porto. Lecture: Intervention and expressiveness in data visualization.
- 2012 Barabási Lab, CCNR, Northeastern University, October 26, Boston. Lecture: Exploring Portraits and Caricatures in Data Visualization.
- Harvard Graduate School of Design, Urban Planning and Design, November 11, Cambridge. Lecture: Information visualization: expressiveness and accuracy.
- Apple Inc., Human Interface Device Prototyping group, April 26, Cupertino. Presentation:
   Experiments in visualization and data artistry.
- Youth Week, Loures City Council, Ceramics Museum, March 30, Loures. Presentation: Visualizing Empires Decline.
- Faculty of Humanities/University of Coimbra, European Masters degree in European Heritage,
   Digital Media and the Information Society, January 7, Coimbra. Lecture: Computers and graphics
   a data visualization point of view.

### Exhibitions, festivals and shows

- Arte Box Unboxing Portuguese Contemporary Culture. An artwork presented by Cultivamos Cultura and Arte Institute, in collaboration with the Metropolitan Washington Airports Authority, MDS Groups, TAP Air Portugal and RHI. On display in June 2023 at the Washington Dulles International Airport. Work: 3,000 weather stations. COMISSIONED Oklahoma City. Work: Diversity Traces. TOP TIER PEER REVIEWED
- 2022 IEEE VIS Arts Program Exhibition: Mingling Spaces. Omni Oklahoma City Hotel, October 16–21,

- Oklahoma City. Work: Diversity Traces. TOP TIER PEER REVIEWED
- Center for Netherlandish Art Innovation Gallery. Museum of Fine Arts, November 20-ongoing, Boston, MA. Works: Aligning Artworks in Time and Productive Lives. COMISSIONED TOP TIER
- Alter(action). Fundação Eugénio de Almeida, May 18-December 19, Évora, Portugal.
   Work: []cene. Comissioned
- *Comunidades Visibles: The Materiality of Migration.* Albright-Knox Art Gallery. February 12 May 16, Buffalo NY. Work: Simulated dendrochronology of U.S. immigration. [INVITED] TOP TIER
- 2020 SEEING NUMBERS: Using visual Metaphors to Explore Data in a More Accessible Format. Brickbottom gallery, January 23–February 22, Somerville MA. Work: Simulated dendrochronology of U.S. immigration.
- 2019 *Reboot, Digital Arts and New Media Festival*, Palácio Baldaya, October 10-13, Lisbon. Work: Simulated dendrochronology of U.S. immigration.
- Who We Are: Visualizing NYC by the Numbers. Museum of the City of New York, September 2019–August 2020, New York. Work: Simulated Dendrochronology of Immigration to New York City, 1840-2019. [COMISSIONED] TOP TIER
- (BE) COMING An Exhibition of Experimental Contemporary Art about the impermanence of becoming permanent. FACTT Trans-Disciplinary & Trans-National Festival of Art & Science. October 31–February 26, P31 Hospital Julio de Matos, Lisbon. Work: Simulated dendrochronology of US immigration.
- Evolution. FACTT Trans-Disciplinary & Trans-National Festival of Art & Science. ArtSci Salon, March 29–May 15, University of Toronto (St. George), Toronto. Work: Simulated dendrochronology of US immigration.
- Where, When, How many? Wild Mazzini, November 1–January 6, Turin. Work: Simulated dendrochronology of U.S. immigration.
- *Eco-Connectivity ArtSci Exhibitions* at Berlin Science Week, Thaer Institute of Agricultural and Horticultural Sciences, November 1–23, Berlin. Video program: An ecosystem of corporate politicians. [SELF SUBMISSION]
- FACTT Trans-Disciplinary & Trans-National Festival of Art & Science, School of Visual Arts, Bio Art Lab, October 25, New York. Work: Simulated dendrochronology of U.S. Immigration for New York state.
- *IEEE VIS Arts Program Exhibition: Data and Identities.* Estrel Hotel & Congress Center, October 23–26, Berlin. Work: Simulated dendrochronology of immigrants and natural-borns in the United States (1790-2016). TOP TIER PEER REVIEWED SELF SUBMISSION
- *Naturalizing Immigration*. West Village H, Northeastern University, October 17–February 18, Boston. Solo EXHIBITION ORGANIZATION AND PRODUCTION
- *Mapping Worlds*. Spaceus annex, October 5–15, Cambridge. Work: Simulated dendrochronology of U.S. immigration. [SELF SUBMISSION]
- *Numerical Existence*. Oi Futuro, September 18–October 18, Rio de Janeiro. Works: Dendrochronology of immigration; Lisbon's blood vessels; Visualizing empires decline; An egoaltruist society. INVITED COMISSIONED
- Future Present, Design for change, MUDE Museum of Design and Fashion, Amoreiras shopping center, September 6–21, Lisbon. Works: Lisbon's Blood Vessels and Simulated Dendrochronology of U.S. immigration (video).

- *Expressive'18 Arts Program Exhibition*. Department of Computer Science, University of Victoria, August 17–19, Victoria, BC. Work: An ego-altruist society. 

  [PEER REVIEWED] [SELF SUBMISSION]
- Being There: ALife 2018 Art Exhibition, National Museum of Emerging Science and Innovation, July 22–27, Tokyo. Work: An ego-altruist society. Top TIER JURIED SELF SUBMISSION
- FACTT Trans-Disciplinary & Trans-National Festival of Art & Science. The Cabinet Project at University of Toronto, January 26–February 15, Toronto. Work: Sill Moving Life.
- 2017 —. MUTE Gallery, September 14–October 13, Lisbon. Work: Sill Moving Life. COMMISSIONED
- . School of Visual Arts, Bio Art Lab, October 1, New York. Work: Sill Moving Life. COMMISSIONED
- — . 7 Mares, November 29, Berlin. Work: Sill Moving Life. COMMISSIONED
- *IEEE VIS Arts Program Exhibition: Sustain and Decay.* Phoenix Convention Center, October 3, Phoenix. Work demo: Wage Inequality in Portugal. TOP TIER PEER REVIEWED SELF SUBMISSION
- New World: Visions through de Ibero-American Design Biennial 2008-2016, MUDE Museum of Design and Fashion, April 22–July 2, Lisbon. Works: An Ecosystem of Corporate Politicians and Visualizing Empires Decline.
- 2016 London Design Biennale, Somerset House, September 7–27, London. Work: UN/BIASED. TOP TIER COMMISSIONED
- 2015 *The Art of Networks II*, New York Hall of Science NYSCI, March 26–May 31, New York. Work: An Ecosystem of Corporate Politicians. INVITED
- 2014 *Ibero-American Biennial of Design*, Central de Diseño de Matadero, November 25–February 28, Madrid. Work: An Ecosystem of Corporate Politicians. TOP TIER SELF SUBMISSION
- 2013 *Nightime-Dreamreal*, Power Station of Art, December 3–March 30, Shanghai. Work: Traffic in Lisbon. Top TIER INVITED
- 2012 *MOVE: The Transportation Expo*, Institute Without Boundaries and Evergreen Canada, Evergreen Brick Works, May 24–Oct 8, Toronto. Work: Lisbon's Traffic. INVITED
- *The Art of Networks*, Foosaner Art Museum, March 8, Melbourne FL. Work: Traffic in Lisbon. INVITED
- CES Consumer Electronics Show, Ericsson's Keynote, January 11, Las Vegas. Work: Signature of Humanity. Dissemination @ Senseable city Lab
- *SMART Future Urban Mobility Symposium*, Visual Explorations of Urban Mobility, National University of Singapore, January, Singapore. Work: Data lenses. 

  DISSEMINATION @ SMART
- 2011 *European Researchers' Night*, Science Museum, September 23, Coimbra. Several works exhibited.
- Talk to Me: Design and the Communication between People and Objects, MoMA Museum of Modern Art, July 24–November 7, New York. Work: Visualizing Lisbon's Traffic. TOP TIER INVITED
- *Design+Multimedia*, Department of Informatics Engineering, May 16-20, Coimbra. Several works exhibited. DISSEMINATION @ UNIV. OF COIMBRA
- Enter 5: Datapolis, international art sci tech biennale, National Technical Library, April 14-17, Prague. Work: The Morphing City. TOP TIER INVITED
- *Electronics Alive VI*, University of Tampa, January 21–February 24, Tampa. Work: Visualizing Empires Decline. INVITED
- 2010 Smirnoff Nightlife Experience, Castelinho, September 31–October 17, São Paulo. Work: Sync/Lost. DISSEMINATION @ 3BITS

- *ACM SIGGRAPH Computer Animation Festival*, Electronic Theatre, August 26-28, Los Angeles. Work: Visualizing Empires Decline. Top TIER SELF SUBMISSION
- *Mediateca Expandida: Habitar*, LABoral Art and Industrial Creation Centre, May 27–November 8, Gijon. Work: Aesthetics and visualization of Lisbon's traffic. TOP TIER INVITED

#### Awards and honors

- Winner *Most Beautiful*, KANTAR Information is Beautiful Awards. Work: Simulated dendrochronology of U.S. immigration.
- Gold for *People, Language, and Identity*, KANTAR Information is Beautiful Awards. Work: Simulated dendrochronology of U.S. immigration.
- Honorable mention, ALife 2018 Art Award. Work: An ego altruist society.
- 2016 Excellence in Teaching Award, College of Arts, Media and Design, Northeastern University.
- Communication Arts Award of Excellence in Typography, Poster category. Work: Indexical Design Symposium Poster, designed with Thomas Starr.
- Distinction and honor, Ph.D. dissertation: Semantic Figurative Metaphors in Information Visualization, University of Coimbra.
- Nominee, Innovative Nation National Award (SIC Notícias and Audi), Lisbon.
- Award for Design and Social Movements, 4th Ibero-American Biennial of Design, Madrid. Work: An ecosystem of corporate politicians.
- One of the ten most significant information designers in the world, La Lettura, Corriere della Sera, p.8-9 (October 27), Milan. [JURIED PANEL]
- Webby Awards 2013, Webby Winner: Retail. Work: Pimkie Color Forecast
- 2012 Cannes Lions 2012, Finalist in PR: Best Use of Digital PR. Work: Pimkie Color Forecast
- Cannes Lions 2012, Design: National Diploma. Work: Pimkie Color Forecast
- Eurobest 2012, Gold in PR: Best Use of Digital PR. Work: Pimkie Color Forecast
- Semi-finalist, ACM SIGGRAPH Student Research Competition, graduate category, Vancouver. Work: Visualizing the Circulatory Problems of Lisbon.
- Honorable mention, MiniMax Mapping Context, École Polytechnique Fédérale de Lausanne.
   Work: Lisbon's Blood Vessels.
- National Award Seeds of Science Junior, Ciência Hoje: Magazine of science, technology and entrepreneurship, Figueira da Foz.
- 2010 Winner, ACM SIGGRAPH Student Research Competition, graduate category, Los Angeles. Work: Visualizing Empires Decline.
- Jury selection, ACM SIGGRAPH Computer Animation Festival, Los Angeles.
   Work: Visualizing Empires Decline.

# **Service and Professional Development**

### Service to the Department of Art + Design

- 2016- IDDV Admissions Committee. Review of applicants to the MFA in Information Design and Visualization. Meetings and campus tours with potential applicants. Interviewing applicants. Hosting graduate open houses for the IDDV program.
- Coordinator of the IDDV-Vancouver program: Assisting setting up the program of graduate courses in IDDV, with an emphasis on quality control in relation to Provincial review requirements; advising setting up the classroom infrastructure (e.g., software, classroom setup) for a successful rollout of IDDV courses, overseeing the IDDV/CAMD effort to hire inregion IDDV teaching faculty and staff, recruiting PT faculty, working with the CAMD Graduate and Marketing and Communications teams and Northeastern's Global Launch Services to shape program marketing and student recruitment strategies, working with the CAMD Graduate team to oversee IDDV-Vancouver admissions and funding.
- Interview candidates for a Visiting Assistant Teaching Professor in the A+D Department.
- 2021-22 IDDV Program Head: Attributing course replacements when appropriate, advising students on their program of studies, clearing students for graduation, supervising the IDDV Thesis committee's constitution and defenses, selecting and recruiting Teaching Assistants to support IDDV courses, meeting with prospective graduate students, attending and presenting at graduate open houses, coordination of IDDV Admissions (including scholarship recommendations), supervising IDDV scheduling and course offerings, including Special Topics, coordinating any matters pertaining to the program with Faculty and students, recruiting Part-time faculty to teach, on-boarding new PT faculty, supervising new PT faculty.
- Information Justice CAMD Cluster Search Committee (open-rank) A+D Affiliate: reviews, interviews and recommendations of A+D candidates.
- Information Design and Data Visualization Search Committee (junior search for A+D and Khoury joint appointment): chaired this committee until Fall, supervising the language for the call and actively disseminating the call.
- 2020-21 Art + Design Graduate Coordinator: IDDV Program Vancouver submission; AEFIS Pilot program for assessment of the IDDV program; creation of a physical MFA Thesis Library; coordination and host of the Art + Design Student Awards; coordination of the MFA Thesis defenses.
- 2019-20 Art + Design Graduate Coordinator: interface the graduate programs and the Dean's Office.

  Work on graduate offerings outside Boston campus. Advocate for graduate programs needs.

  Coordinate with Games and Experience Design Heads. Harmonize graduate offerings between IDV and Experience Design.
- IDV Program Head: advise students on their course plan, review or suggest waiving required courses, coordinate advisor's distribution for MFA students, review requests for research coops, coordinate with co-op coordinator, find and recommend part-time faculty, coordinate IDV schedule with the scheduling committee and other coordinators (inc. time and room requirements), review and approve requests to delay graduation dates, and suggesting Special Topics in Design to be taught every semester, on-boarding of new faculty, attribute graduate student scholarships.
- Promotion booth of the IDV Program at IEEE VIS with CAMD Marketing.
- IDV promotion: posters worked with colleagues and students to design a new poster for the program to mail to 300 art schools and individuals.

- Worked on the MS IDV 4+1 plan of study.
- A+D Teaching Assistant Model for Graduate Programs: working proposal for establishing a framework to request for TAs for Graduate Programs.
- MS IDV in Vancouver: meeting in-person with Vancouver, redesigning the program for British Columbia's MS requirements, drafted the full proposal to submit to BC's government (learning objectives, syllabi of every course, resumes of all Faculty teaching in the Program).
- IDV Program restructure: STEM designation for the IDV MFA, similarly to the MS. Common first year for MS+MFA. Change of requirements. Program name change (now IDDV Information Design and Data Visualization). Multiple course name changes. Four new plans of studies accommodating for first and second (research) co-ops. Restructure of the credit-hours required for the Thesis. One new required course. Eliminated several pre-requisites, and added others for multiple courses.
- Organized six in-person talks for the IDV Program (speaker fees, food for lunch-talks, and recruited students to design posters for those): Alberto Cairo (with the School of Journalism); Cindy Xiong; Benedikt Gross (with the Center for Design); Manuel Lima (with the School of Journalism), Paolo Ciuccarelli and Qingyue Li (alum).
- Hosted and organized the department IDV Welcome Orientation.
- Evaluation of one part-time faculty class (Interaction Design 1: Responsive).
- Chair of the Search Committee for Visiting Assistant Professor in Information Design and Visualization.
- Tenure Process Workshop.
- Member of joint Search Committee Art + Design and Psychology until the end of 2020.
- Evaluation of two part-time faculty classes (Information Design Studio 2 and Visualization Technologies).
- Member of the Search Committee for two positions in Design at the level of Assistant Professor and Associate/Full Professor. More than 100 applications reviewed, had 7 candidates visiting, designed 7 posters for their talks.
- STRIDE Faculty Search Committee Workshop.
- Organization and dissemination of the IDV Thesis Proposals presentations: designed and printed 11 posters, one for each session.
- Member of the ad hoc committee for Non-Tenure Track Governance.
- Organization of the IDV Thesis defenses: proposed a defense model that pushes for the public academic scrutiny of the Theses, which was implemented.
- Tenure Process Workshop.
- 2016 Poster design jointly with Prof. Thomas Starr for the IDV program.
- Organization and dissemination of the IDV Thesis Proposals presentations: designed and printed 20 posters, one for each session.
- Poster design jointly with Prof. Thomas Starr for the Indexical Design Symposium organized by the IDV program. This poster was the recipient of a Communication Arts Award of Excellence in Typography.

### Service to the College and University

- 2024 CAMD Faculty Grants and Awards Committee Snell Library CDS Neighborhood Council
- 2022-23 Co-chair of CAMD's Search committee in the multi-college open-rank search Food, Water, Energy Nexus.

2022 2019 2018 — 2017 —	Faculty Marshal at CAMD Commencement Ceremony. Faculty Marshal at CAMD Commencement Ceremony. Faculty Marshal at Northeastern Commencement Ceremony. Member of the CAMD Ph.D. Creative Critical Practice subcommittee. Presentation of research in CAMD's address by Dean Hudson in the students' Welcome Day. Attendance of Tapestry Conference on behalf of the IDV program.
Service to the Profession	
2024	General chair of the VISAP (Vis Arts Program) associated event at IEEE VIS Conference.
2023	Chair of the Information XYZ exhibition, the exhibition at the Information+ conference,
	Edinburgh, 22-24 November.
Since 2021	Member of program committee, Information+ conference.
Since 2016	Member of program committee, IEEE VIS Arts Program.
_	Member of program committee, Expressive: Computational Aesthetics – International
	Symposium on Computational Aesthetics in Graphics, Visualization, and Imaging.
2012-23	Member of program committee, evomusart – International conference on biologically
2010	inspired music, sound, art and design.
2019	Invited reviewer, Digital Humanities Quarterly Journal.
2018	Chair (organizer and curator) of the ACM/Eurographics Expressive'19 Arts Program, May 5-6 2019, Genoa, Italy. On top of being a regular Program Committee member, we wrote a call for
	artworks, curated and selected artworks for the exhibition, and reviewed art papers
	submissions. Organized the exhibit (venue, equipment, logistics). Proceedings published in
	the Eurographics Digital Library and the ACM Digital Library.
_	Member of program committee, iV2018 International Conference on Information
	Visualisation, Information Visualisation Society.
2015	Member of program committee, iV2015 International Conference on Information
	Visualisation, Information Visualisation Society.
2012	Invited Reviewer, Journal of Genetic Programming and Evolvable Machines – Special Issue:
	Evolutionary Computation in Art, Sound and Music, Springer, 3, 2013.
2011-12	Member of organizing committee, evostar 2011 and evostar 2012 – the main European events
	on Evolutionary Computation.
2011	Image consultant, Bridges Conference 2011 – Mathematics, music, art, architecture, culture.
2010	Member of local organization, ICCC-X First International Conference on Computational
	Creativity.