## **MAURO MARTINO PhD**

**CURRICULUM VITAE** 

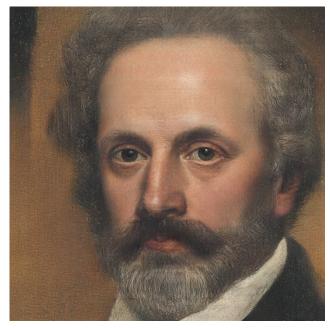
## **CURRICULUM VITAE**

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04	<b>PROJECTS</b> MAURO MARTINO PROJECTS VISUAL AI LAB PROJECTS		CONFERENCE OTHER MAJOR PUBLICATIONS
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Mauro Martino is Research Manager and Principal Research Staff Member at the MIT-IBM Watson AI Lab, where he founded the "Visual Artificial Intelligence Lab". He graduated in Design from the Politecnico di Milano. where he also obtained his PhD with a thesis in Urban Interaction Design within Carlo Ratti's Senseable City Lab (MIT - Massachusetts Institute of Technology), where he spent a year and a half as a visiting researcher. Mauro holds several patents and has co-authored over 30 scientific publications. He has created data visualization for the BBC, Scientific American, The New York Times, The Washington Post, Süddeutsche Zeitung, Der Spiegel, Le Figaro, Corriere della Sera, National Geographic, Popular Science, Wired. His work has been exhibited worldwide at venues such as the Venice Biennale, the Serpentine Gallery in London, the Ludwig Museum in Budapest, GAFTA in San Francisco, Lincoln Center in New York, the ZKM | Center for Art and Media in Karlsruhe (Germany), and his work is part of the permanent collection of the Ars Electronica Center in Linz. Mauro has been a presenter at TEDx Cambridge (2012) and TEDx Latvia (2016), his works have been featured in scientific journals such Nature, Science, PNAS, among all, and textbooks about data visualization: "Data Visualization" by Andy Kirk, "The Truthful Art" by Alberto Cairo, "The Best American Infographics" 2015 and 2016 editions.

Mauro is an award-winning designer whose projects received the Gold Medal at the 2017 Vizzies Visualization Challenge by National Science Foundation, he has won several times the Webby Award, the Innovation by Design Award (by Fast Company), the Information is Beautiful Award

For further information on Mauro's projects, please visit www.mauromartino.com and mitibmwatsonailab.mit.edu



Portrait of Mauro Martino generated by the AlPortrait model developed by Mauro Martino in 2018

Full Name: Mauro Martino

Date of Birth: 6 May 1977

Citizenship Status: Italian citizen & USA permanent resident

Languages: Italian: native; English: fluent, written and spoken; Portuguese, German, Russian: basic knowledge

Field of Interest: Data Visualization, Information Design, Machine Learning, Generative AI, Interaction Design, Computational Design

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## 01 EDUCATION

## Postdoctoral Research Associate at Center for Complex Network Research

Northeastern University John F. Kennedy School of Government at Harvard University (Cambridge MA, 2010-2011)

## Postdoctoral Research Affiliate in Data Visualization at Senseable City Laboratory

Massachusetts Institute of Technology (Cambridge MA, 2009-2010)

## Full-time Research Affiliate in Data Visualization at Senseable City Laboratory

Massachusetts Institute of Technology (Cambridge MA, 2008-2009)

## PhD in Design & Technologies

Thesis: Urban Interaction Design: Digital Urban Simulation and Interaction.

Polytechnic of Milan
(Milan IT, 2006-2009)

# MSc Degree in Product Service Systems Design (graduated with honors)

Thesis: From 200m to 20m, location-based services in the age of Galileo - Global Navigation Satellite System (GNSS).

Polytechnic of Milan (Milan IT, 2003-2006)

## BS Degree in Product Design (graduated with honors)

Thesis: Chromo/Music Therapy with the Scriabin's Prometheus - The Poem of Fire.

Polytechnic of Milan (Milan IT, 2000-2003)

# High school degree with science concentration (grade 60/60)

Liceo G.B. Scorza (Cosenza, 1992-1997)

## 02 POSITIONS

## **HISTORY OF APPOINTMENTS**

Founder of the Visual Artificial Intelligence Lab Research Manager and Principal Research Staff Member MIT-IBM Watson AI Lab (Cambridge MA, 2017 - present)

## Professor of Practice - Part-time faculty

Northeastern University (Boston MA, 2017 - present)

## Manager

IBM Watson Group (New York City, 2013 - 2017)

# Assistant Research Professor at Center for Complex Network Research, and at Lazer Lab

Northeastern University (Boston MA, 2011 - 2013)

### Research Associate

Institute for Quantitative Social Science Harvard University (Cambridge MA, 2011-2014)

## **Teaching Assistant**

Faculty of Design, Politecnico di Milano (Milan, 2006 - 2008)

### Research Assistant

Clarion - Research and Development (Tokyo, 2005)

## COMMITTEE POSITIONS AND OTHER ASSIGNED DUTIES

## Member of Jury

ReHumanism Prize (Rome, 2020-2021)

#### **Member of Scientific Committee**

MoVIS Workshop at VIS-IEEE, Online (2020)

#### **Member of Scientific Committee**

HAI-GEN (Human-AI Co-Creation with Generative Models) Workshop at IUI-IEEE, Online (2020)

## Mentor at the Innovation Workshop

Skoltech University (Moscow, Russia, 2019-2020)

#### **Member of Scientific Committee**

VISAP - IEEE VIS Arts Program (2019 - 2020)

## Member of Jury

The Webby Awards (New York City, 2018 - 2020)

#### Member of PhD Committee

University of Lausanne (Lausanne, Switzerland, 2018)

### Member of Jury

Innovation by Design Awards - Fast Company (2017 and 2020)

### **Advisor**

Monet GmbH LLC (London, 2017 - 2019)

## Design Ambassador

Brera Design Week - Fuorisalone - Salone del Mobile (Milan, 2019)

#### **Founding Member**

Lincoln Center Global Exchange (New York City, 2015)

#### **Academic Director of Summer School**

Université d'été, Yverdon-les-Bains, Swiss (2012)

#### **Organizing Committee**

The First Workshop on *Pervasive Urban Applications* (PURBA) (San Francisco CA, 2011)

## Workshops chair

Tec Art Eco - Arts, Environment and Technology (Lugano, Switzerland, 2011)

## Workshops chair

International Conference on User Centric Media (Palma de Mallorca, Spain, 2010)

## 03 DISTINCTIONS

Fast Company - Innovation by Design Awards

Best Data Design: 150 Years of Nature

(2020)

Webby Award

Winner: 150 Years of Nature

(2020)

Webby People's Voice Award

Winner: 150 Years of Nature

(2020)

**Muse Creative Awards** 

Winner: 150 Years of Nature

(2020)

Webby People's Voice Award

Winner: AI Portraits

(2019)

Fast Company - Innovation by Design Awards

Best Experimental Design: Al Portraits

(2019)

**Muse Creative Awards** 

Platinum Medal: Al Portraits

(2019)

HUB Madness 2019 - by Boston Globe, Harvard, MIT

Coolest project from 2019: AI Portraits

(Boston, 2019)

Kantar Information is Beautiful Awards 2017

Winner: Forma Fluens project

(London, 2017)

International Science and Engineering Visualization

Challenge of the National Science Foundation

Winner: Network Earth project

(2017)

Fast Company - Innovation by Design Awards

Best Websites & Platforms: Watson News Explorer

(2016)

Kantar Information is Beautiful Awards 2016

Silver Medal, Commercial Project: IBM Watson News

Explorer

(London, 2016)

Kantar Information is Beautiful Awards 2015

Gold Medal in Data visualization: Rise of Partisanship

(London, 2015)

Kantar Information is Beautiful Awards 2015

Honorable mention - Motion Infographic: Charting

Culture

(London, 2015)

Politecnico di Milano

National scholarship for PhD studies

(2006 - 2009)

Politecnico di Milano

Socrates scholarship for graduate studies

(2003 - 2004)

## 04 PROJECTS

## **MAURO MARTINO PROJECTS**

## Mapping the NFT revolution: market trends, trade networks, and visual features

Non-Fungible Tokens (NFTs) are digital assets that represent objects like art, collectible, and in-game items. They are traded online, often with cryptocurrency, and are generally encoded within smart contracts on a blockchain. Public attention towards NFTs has exploded in 2021, when their market has experienced record sales, but little is known about the overall structure and evolution of its market. Here, we analyze data concerning 6.1 million trades of 4.7 million NFTs between June 23. 2017 and April 27, 2021, obtained primarily from Ethereum and WAX blockchains. First, we characterize statistical properties of the market. Second, we build the network of interactions, show that traders typically specialize on NFTs associated with similar objects and form tight clusters with other traders that exchange the same kind of objects. Third, we cluster objects associated to NFTs according to their visual features and show that collections contain visually homogeneous objects. Finally, we investigate the predictability of NFT sales using simple machine learning algorithms and find that sale history and, secondarily, visual features are good predictors for price.

https://www.turing.ac.uk/blog/non-fungible-tokens-can-wepredict-price-theyll-sell (London, 2021)

### **Strolling Cities**

Strolling Cities unveils the naked, materially seductive form of several Italian cities, by means of millions of photos taken during the recent lockdowns ('20/'21) that show the urban space as an unfiltered landscape of walls, streets, and buildings. Returned to the immanence of their materiality, cities abandon their stereotyped semantic contents, to embrace a new dimension of extreme elusiveness. A generative A.I. model trained with these images creates perpetually moving videopaintings, whose indefinite contours suggest a potential transformation of urban places, once ascribed to specific 'social functions', into open spaces available to countless (re)writings. The observer strolls while standing still, and the city changes in front of her, generating a unique

cognitive experience, questioning and re-imagining the space at once. The A.I. reacts to voice commands or to a poetic text, producing new associations that immensely broaden the urban imaginary of the future.

https://strollingcities.com/
(Venice, 2021)

#### **Latent Compass:**

GAN latent spaces are full of human interpretable directions. Here we let creators visually discover them. The compass wordlessly maps a perceptual experience, similarity, or difference onto a direction in latent space, defining a transformation that can be applied to any image.

(Cambridge MA, 2020)

#### Vox2Vox:

A project to reimagine 3D-to-3D topology transformation method using Generative Adversarial Networks (GAN). We use a modified pix2pix GAN, which we call Vox2Vox, to transform the volumetric style of a 3D object while retaining the original object shape. (Cambridge MA, 2020)

#### **Explore IBM Strategies**

A collection of data visualizations reserved for the board and the CEO of IBM, to understand the last 10 years of strategies of the company led by Ginni Rometty. (Armonk, New York, 2020)

#### 150 Years of Nature:

This map represents data specific to Nature journal, but its bigger takeaways are about how discovery informs and alters our thinking, how ideas are born when disciplines collide.

https://www.nature.com/articles/d41586-019-03325-6 (Cambridge MA, 2019)

## Al Portraits Pro:

This project uses AI to transform any picture into a 15th-Century Portrait. Model and data bias are explored by playing.

(Cambridge MA, 2019)

#### Paper Graph:

Paper Graph is an online visual tool to understand the latest literature in a given research community by using co-citation, citation, co-authorship network visualizations.

http://papergraph.res.ibm.com (Cambridge MA, 2019)

#### Al Portraits:

Website that uses a neural network to analyze your photos and generate a brand-new portrait in your likeness. The result is inspired in part by the faces of the most famous actors.

(Cambridge MA, 2018)

#### Wonder Net:

This project is bringing networks to life as physical objects. We add physicality to the nodes and links to create 3d network sculpture without overlap, both of nodes and links.

http://netwonder.net (Cambridge MA, 2018)

#### Forma Fluens:

Forma Fluens (Latin for "flowing form") shows an overlapping collection of drawings made by over a billion people. Each picture is different but all of them together result in a new picture: the corners merge and an iconographic image of the object is created.

http://formafluens.io (Cambridge MA, 2017)

## **Science Paths:**

A new visualization inspired by one of the most beautiful Joy Division covers.

http://sciencepaths.kimalbrecht.com (Cambridge MA, 2016)

#### **Network Earth:**

Earth is animated by complex interactions between its life forms, rocks, atmosphere, and water. All living creatures - animals and plants, bacteria, fungi, and others - are involved in a worldwide, multi-layered web of cooperation. In this video we explore, as an example, the connections that exist between Ants and Plants, and we discover the resilience and fragility of this network. https://www.nature.com/articles/d41586-019-00243-5 (Cambridge MA, 2016)

#### News Explorer:

Converting the flow of news into a network in real time. https://news-explorer.mybluemix.net/ (Cambridge MA, 2015)

### Rise of Partisanship:

Political Polarization in the U.S. Congress has been a topic of much discussion recently. We show the party polarization of the House of Representatives through time, with a focus on which members continue to participate across party lines.

https://www.mamartino.com/projects/rise\_of\_partisanship/ (Cambridge MA, 2015)

#### **TED Watson:**

Imagine being able to ask a panel of TED speakers: Will having more money make me happy? Will new innovations give me a longer life? This tool is set to help people explore the ideas inside TED Talks videos. A new way to explore audio video content, a project that I coordinated until the launch of the first demo. (New York City, 2015)

#### VoroGraph

Visualization tools for Epidemic Analysis (Boston MA, 2015)

#### Watson 500

One of the first official Watson demos accessible to customers in the Astor Place laboratories in New York City. A tool to explore 10 years of annual reports of the 500 largest companies in the world. (New York City, 2015)

#### **Charting Culture:**

This data-film distills hundreds of years of culture into just five minutes, mapping cultural mobility by tracking more than 120,000 births and deaths of notable individuals. One of the most viewed videos ever on Nature's social channels.

https://www.nature.com/articles/d41586-019-00389-2 (Cambridge MA, 2014)

#### Experience JAM:

A visual exploration of almost 128,000 comments on how to better serve IBM clients from more than 248,000 participants around the world. (London, 2013)

#### MoneyBombs:

This data visualization reveals the geographic distribution of political donations made by individuals throughout 2012.

https://www.mamartino.com/vispolitics/project/moneybombs/ (Cambridge MA, 2012)

#### Super PAC:

In 2010, the Supreme Court ruled the First Amendment prohibited the government from restricting independent political expenditures by corporations and unions. Using SuperPACs' quarterly FEC reports, this visualization tracks fundraising and expenditures on the 2012 Presidential campaign. It is one of the first data sonification experiments.

https://www.mamartino.com/vispolitics/project/angrypac/Super\_PAC.html

(Cambridge MA, 2012)

## Forest of Advocacy:

"Forest of advocacy" provide a dynamic look at the partisan tilt of giving within organizations.

https://www.mamartino.com/vispolitics/project/forestofadvocacy/

(Cambridge MA, 2012)

#### **Boston Area Research:**

This data visualization shows the timing and location of a year's worth of requests made through the CRM system in Boston, demonstrating how service calls can act as the eyes and ears of the City, alerting city services to the needs of its neighborhoods.

(Boston MA, 2012)

#### Interactome:

In this project I'm using visualization tools to identify the disease module of Asthma and COPD in our cellular network, where node are proteins and links physical interaction among them.
(Cambridge MA, 2012)

#### CineData

Using storytelling in dynamic visualizations of political networks, (Boston, 2012)

#### Place Pulse

This project uses crowdsourcing to convert people's perceptions of streets into a quantitative benchmark for measuring fuzzy qualities like how safe, rich, and unique a city feels.

(Linz Austria, 2011)

#### Control

How to control a complex network with minimum number of nodes? For a given directed network, we calculate its maximum matching: a largest set of edges without common heads or tails. From it we identify the minimum set of driver nodes to control. By injecting signals to those driver nodes, we can fully control the network. There is a "cactus" structure underlying the controlled network, which is the "skeleton" for maintaining controllability.

https://www.mamartino.com/projects/control.html (Cambridge MA, 2011)

### Borderline

A project to redraw the map of Great Britain from a network of human interactions, inferred from a large telecommunications database.

http://senseable.mit.edu/network/networko-society2.html (UK, 2010)

### AIDA: Affective Intelligent Driving Agent

A project in collaboration with Volkswagen to develop a platform comprising of a personal robot and an intelligent navigation system that aims to bring an innovative driving experience.

(Cambridge MA, 2009)

## Obama | One People

An advanced data analysis presenting two dazzling visualizations that celebrate Barack Obama and the people who supported him from all over the U.S. and the world.

https://www.mamartino.com/projects/obama.html (Washington, 2009)

## Ocean of Information

Tool to explore human movement dynamics in a Metropolitan Area. By analyzing a mass of individual cell phone traces, we build a Human-City Interaction System for understanding urban mobility patterns at different user-controlled temporal and geographic scales. (Cambridge MA, 2008)

### Real Time Copenhagen

A collaboration with the city of Copenhagen to develop concepts that showcase how embedded technologies can improve the sustainability of the city, exhibited in City Hall during Kulturnatten.

(Copenhagen, 2008)

## VISUAL AI LAB SELECTED PROJECTS | 2018-2020

### Multi Modal Story Design

Use of generative models to create illustrated fairy tales and creation of a new interface capable of involving users in the construction of the story, modifying text and images proposed by the AI model. (Cambridge MA, 2020)

### **Human-Machine Co-Creation with Generative Models**

Future general AI systems will need to possess capabilities akin to human intelligence, such as the capacity for learning, reasoning, planning, critical thinking, problem-solving, and creativity. In this exploratory computer science proposal, we focus on this latter ability of creativity by seeking to understand how teams of human subject matter experts and AI systems can effectively work together to co-create novel, innovative solutions.

(Cambridge MA, 2020)

#### Saliency Explorer

Using dataset annotations and black-box saliency methods to systematically explore model behavior. (Cambridge MA, 2020)

# Accelerated Discovery | RXNMapper: Unsupervised Attention-Guided Atom-Mapping

Knowing how atoms rearrange during a chemical transformation is fundamental to numerous applications aiming to accelerate organic synthesis and molecular discovery. This labelling is known as atom-mapping and is an NP-hard problem. Self-supervised neural networks called Transformers have recently shown tremendous potential when applied to textual representations of different domain-specific data, such as chemical reactions.

(Zurich, Switzerland, 2020)

### Accelerated Discovery | Covid19 Explorer

Learn the latent space of small molecules using a Variational AutoEncoder model trained on the ZINC MOSES and BindingDB datasets.

Given a specific target sequence, use a controlled sampling scheme to generate molecules from the latent space with high target binding affinity, high selectivity, and high drug-likeliness.

(Cambridge MA, 2020)

## Auto AI | Visual Analytics for Model Selection in Automated Forecasting of Multivariate Time Series

Identify visualization techniques to explain correlation/causality across in multivariate time series. Multivariate time series visualization components for time series forecasting automation.

Visual analytics for model selection/evaluation process in multivariate time series forecasting. (Cambridge MA, 2019-2020)

# **Auto AI | Visualizations on Knowledge Augmentation** (Cambridge MA, 2019-2020)

#### Visualizing and Understanding Generative Adversarial Networks

How does a GAN represent our visual world internally? What causes the artifacts in GAN results? How do architectural choices affect GAN learning? Answering such questions could enable us to develop new insights and better models.

(Cambridge MA, 2018-2020)

#### **Gan Paint**

GANPaint draws with object-level control using a deep network. Each brush activates a set of neurons in a GAN that has learned to draw scenes. (Cambridge MA, 2018)

## **05 TEACHING**

#### **TEACHING EXPERIENCE**

### **Artificial Intelligence for Creativity and Design**

Approx. 20 Students (Northeastern University, 2020)

#### Mentor at Innovation Workshop

(Skolkovo Institute of Science and Technology, Moscow, 2019)

## Summer School on Methods for Computational Social Science

(Gesis Leibniz Institut for Social Sciences, Berlin, 2019)

## Design workshop - Deep learning for Art, Aesthetics, and Creativity

Approx. 60 Students (MIT, 2019)

#### **Visual Cognition**

Approx. 20 Students (Northeastern University, spring semester 2018)

## **Visual Cognition**

Approx. 10 Students (Northeastern University, fall semester 2018)

#### **Data Visualization Studio**

Approx. 20 Students (Northeastern University, spring semester 2017)

### Design workshop - Visualizing Data

Approx. 20 Students (Skolkovo Institute of Science and Technology, Moscow, 2016)

## **Teaching Assistant - Network Visualization**

Approx. 20 Students (Northeastern University, 2012-2013)

#### Teacher and Academic Director of UdE 2012

Approx. 40 Students (Université d'été, Yverdon-les-Bains, Swiss 2012)

## Design workshop | Tec Art Eco - Arts, Environment and Technology

Approx. 30 Students (Lugano, Switzerland, 2011)

## Design workshop - Visualizing Urban Data

Approx. 20 Students (MIT, 2010)

## Teaching Assistant of Theoretical methods for design research

Approx. 50 Students (Politecnico di Milano, 2006-2007)

### Teaching Assistant of Product service system design

Approx. 50 Students (Politecnico di Milano, 2006-2007)

## Teaching Assistant of the Faculty of Design

Approx. 40 Students (Politecnico di Milano, 2005)

#### SYMPOSIA ORGANIZED

### **Design Your Creativity**

#### Augmenting human creativity with deep neural network

A workshop and a forum where we discuss, with examples and demos during the workshop, whether Artificial Intelligence can make the designer more creative. A forum with the main thinkers of the academic, industrial and artistic world. Approx. 300 Participants (Luiss Hub for makers, Milano, Italy, 2019)

## CREATING AN INTELLIGENT IDENTIFICATION SYSTEM FOR THE CITY

Academic Director of summer school at the Université d'été Yverdon-les-Bains.

Approx. 50 Participants

(Yverdon-les-Bains, Swiss, from 5th to 31th of August 2012)

## 06 EXHIBITIONS

### XVII Venice Architecture Biennale - Italian Pavilion.

Exhibition curated by Alessandro Melis; featuring Strolling Cities (Venice, Italy, May 22 - November 21, 2021)

## BarabásiLab. Hidden Patterns – ZKM | Center for Art and Media

Exhibition curated by József Készman; featuring Wonder Net, Interactome, Control, A Century of Physics, Resilience, Success in Science, The Connectome, Data Sculpture in Bronze, Fake News, 150 Years of Nature (Karlsruhe, Germany, 27 March 2021 – 9 January 2022)

## BarabásiLab: Hidden Patters. The Language of Network Thinking - Ludwig Museum

Exhibition curated by József Készman; featuring Wonder Net, Interactome, Control, A Century of Physics, Resilience, Success in Science, The Connectome, Data Sculpture in Bronze, Fake News, 150 Years of Nature (Budapest, Hungary, 10 October 2020 – 21 March 2021)

## Understanding AI - Ars Electronica Center

Exhibition curated by Ali Nikrang, Stefan Mittlböck-Jungwirth-Fohringer, Peter Freudling; featuring Forma Fluens (Linz, Austria, Permanent Collection)

## Places & Spaces: Mapping Science

Exhibition curated by Katy Börner; featuring Charting Culture, Science Paths, Watson News Explorer, Nature 150 (Traveling exhibition, has been shown at over 375 venues in 28 countries on 6 continents (http://scimaps.org/exhibitions), 2015 - Present)

## Data and Identities, VISAP'18 Exhibition - IEEE InfoVis

Exhibition curated by *Paul Heinicker and Paolo Ciuccarelli*; featuring *WonderNet* (Berlin, Germany, 23-26 October 2018)

#### 123 DATA - Fondation Groupe EDF

Exhibition curated by *David Bowen*; featuring *Forma Fluens* (Paris, France, 4 May – 6 October 2018)

# Aiartonline, NeurIPS - Machine Learning for Creativity and Design

Exhibition curated by Luba Elliott; featuring Forma Fluens, DAVID, AI Self Portrait (NeurIPS location and online, 2017-Present)

### Sustain & Decay, VISAP'17 Exhibition - IEEE InfoVis

Exhibition curated by *Yoon Chung Han* and *Esteban Garcia Bravo*; featuring *Forma Fluens* (Phoenix, Arizona, 1-6 October 2017)

#### **OPEN FIELDS, RIXC Art Science Festival**

Exhibition curated by Lev Manovich, Rasa Smits and Raitis Smits; featuring Network Earth (Riga, Latvia, 29 September - 2 November 2016)

### DATA DRIFT, kim? Contemporary Art Center in Riga

Exhibition curated by Lev Manovich, Rasa Smite and Raitis Smits; featuring Charting Culture (Riga, Latvia, 10 October - 22 November 2015)

## **Global Exchange - Lincoln Center**

Exhibition featuring *Charting Culture* (New York City, USA, 10-12 September 2015)

#### FuturePerfectSweden, Ö Festival

Exhibition featuring *Borderline* (Vaxolm, Sweden, 23 - 26 August 2012)

### PULS - Hacking the City, MAD Emergent Art Center

Exhibition curated by *Tom Veeger* and *René Paré*; featuring *Borderline* (Eindhoven, 22 - 30 October 2011)

## Sensing Place, Placing Sense - Ars Electronica

Exhibition curated by *Dietmar Offenhuber* and *Katja Schechtner*; featuring *Place Pulse* (Linz, 3 - 9 September 2011)

#### 2011 Festival, FutureEverything

Exhibition curated by *Drew Hemmen*; featuring *Borderline* (Manchester UK, 11 - 14 May 2011)

**Sustainable Development, MIT Press Online Museum** Digital exhibition curated by *Jeremy Hight*; featuring *Obama* | *One People* (2011)

**Serpentine Map Marathon, London Serpentine Gallery** Exhibition curated by *Hans Ulrich Obrist*; featuring *Borderline* (London, 16 - 17 October 2010)

## Retrospective of the Senseable City Lab, Grey Area Foundation for the Arts

Exhibition curated by *Carlo Ratti* and *Assaf Biderman*; featuring *Borderline* and *Obama* | *One People* (San Francisco CA, 11 June – 11 August 2010)

## **Ecological Urbanism, Harvard University**

Exhibition curated by Graduate School of Design; featuring *Obama* | *One People* (Cambridge MA, 30 March - 17 May 2009)

# 07 SELECTED INVITED LECTURES AND SEMINARS

Armonicamente 4.0 - Arte, Scienza e Tecnologia (Online - 2 July 2020)

## ConflictxDesign - 8TH ANNUAL HARVARDxDESIGN CONFERENCE

(Harvard University, Cambridge MA, 23 February 2020)

**Arthur I. Miller in Conversation with Mauro Martino** (MIT Press, Cambridge, 5 November 2019)

#### Talk at Accurat

(Milan, 11 October 2019)

#### **Design Your Creativity**

(Milan, 5 October 2019)

### **Broad Institute**

(Cambridge, 2 October 2019)

## **GANocracy: Democratizing GANs**

(MIT, Cambridge, 31 May 2019)

## ICT Forum 2018 - Persone. Tecnologie. Competenze

(Kilometro Rosso Innovation District, Bergamo, 18 October 2018)

#### Rixc Art Science Festival - Global Control

(The National Library of Latvia, Riga - Latvia, 13 - 14 September, 2018)

## Data visualization and artificial intelligence - UCL (University College London)

(London, 28 November 2017)

## Sustainable Development Cinema - World Resources Forum

(Geneva - Switzerland, 24-25 October 2017)

#### **Brera Design Days**

(Milan, 7 October, 2017)

#### DATA NATIVES - City University of London

(London, 28 April 2017)

#### TEDxRiga: Dare to Be

(Riga, Latvia, 17 June 2016)

#### **CNS Center**

(Indiana University, Bloomington, 25 April 2016)

### **SYSTEMS ANALYSIS**

(Vienna, Austria, 11-13 November 2015)

#### RIXC Art Science Festival - DATA DRIFT

(Riga, Latvia, 10 October 2015)

## Visualization and Society - École Polytechnique Fédérale de Lausanne

(Lausanne, Switzerland, 18 May 18 2015)

## Big Data Fest - New York Hall of Science

(New York City, USA, 28 March 2015)

#### Skoltech lectures on Data Visualization

(Skoltech University, Moscow, 20 February 2014)

## Big Data Workshop - University of Massachusetts

(Boston, October 2013)

### IBM Research Colloquium

(São Paulo, Brazil, August 2013)

## World Economic Forum Workshop on the Design of Complexity

(MIT, Cambridge, July 2013)

## SEMINAR - Department of Computer Science University of Houston

(Houston, February 2013)

## **TEDx Cambridge THRIVE**

(Harvard University, Cambridge MA, 19 November 2011)

## Tec Art Eco - Arts, Environment and Technology

(Lugano, Switzerland, 5-8 May 2011)

## MIT Enterprise Forum, Auto-ID & Sensing Solutions

(MIT, Cambridge, 16 May 2010)

### 08 PUBLICATIONS

## PAPERS IN REFEREED JOURNALS & CONFERENCE PROCEEDINGS

## Mapping the NFT revolution: market trends, trade networks, and visual features

Matthieu Nadini, Laura Alessandretti, Flavio Di Giacinto, Mauro Martino, Luca Maria Aiello & Andrea Baronchelli Scientific Reports 2021

## FairyTailor: A Multimodal Generative Framework for Storytelling

Eden Bensaid, Mauro Martino, Benjamin Hoover, Hendrik Strobelt arXiv.org 2021

#### Latent Compass: Creation by Navigation

Sarah Schwettmann, Hendrik Strobelt, Mauro Martino NeurlPS 2020

## 3D Topology Transformation with Generative Adversarial Networks

Luca Stornaiuolo, Nima Dehmamy, Albert-László Barabási, Mauro Martino ICCC 2020

#### Deepling: A Visual Interpretability System for Convolutional Neural Networks

Daniel Karl I. Weidele, Hendrik Strobelt, Mauro Martino, SysML 2019

### Covering the News with (AI) Style

M Merler, CN Santos, M Martino, AM Gliozzo, JR Smith NeurlPS 2018

#### Wonder Net.

Mauro Martino, Alice Grishchenko, Nima Dehmani, Albert-László Barabási IEEE VISAP 2018

## Vox2Net: From 3D Shapes to Network Sculptures,

Luca Stornaiuolo, Nima Dehmamy, Mauro Martino NeurIPS 2018

#### Forma Fluens,

Mauro Martino, Hendrik Strobelt, Owen Cornec, IEEE VISAP 2017

#### The Panta Rhei: Modernizing the Marquee,

Megan Monroe, Mauro Martino, Human-Computer Interaction – INTERACT, 2017. Lecture Notes in Computer Science, vol 10515. Springer

## Quantitative, Qualitative, and Historical Urban Data Visualization Tools for Professionals and Stakeholders,

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