



181 Longwood Avenue Boston, Massachusetts 02115-5804 **Department of Medicine**Channing Division of Network Medicine

## Channing Network Science Seminar

March 22 (Friday), 2019, 11am @ 5th-floor conference room



Mauro Martino IBM Research Al Northeastern University

## Beautiful Bits - The beauty that excites in digital interfaces and artificial intelligence

Data have their own beauty, which evokes the abstract emotional forms of Wassily Kandinsky and Paul Klee, the more rational and geometric forms of Josef Albers and Piet Mondrian. Everything can be transformed into a flow of data: our face, the sounds of the city, the interactions between the proteins in our cells. This information is transformed into bits and our digital experiences become richer in content. Beautiful Bits is the search for an aesthetic linked to the representation of the world through data, the attempt to merge the analytical knowledge of an algorithm with the poetry of art. A search for beauty in the world of data that is not self-referential. Through the emotions linked to the experience of beauty we make memorable interfaces, data visualizations become visual notes that enrich our memories and help us to understand the world, both digital and real. Particular attention will be given to the visual language in the deep neural networks, an in-depth analysis of how to use visualization on neural network models.

BIO: Mauro Martino is the founder and director of the Visual Artificial Intelligence Lab at IBM Research, with offices in Cambridge, US, and Professor of Practice at Northeastern University in Boston. Mauro is a pioneer in the use of the artificial neural network in the sculpture field. His interactive AI works are used by millions of people, some examples: News Explorer - news-explorer.mybluemix.net; Forma Fluens - formafluens.io; AI Portraits - aiportraits.com. His works have been featured in important scientific journals and conference such Nature, Science, PNAS, NeurIPS among all, and textbooks about data visualization: "Data Visualization", "The Truthful Art", "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, Innovation by Design Award by Fast Company, Kantar Information is Beautiful Award. His projects have been shown at international festivals and exhibitions including Ars Electronica, RIXC Art Science Festival, Global Exchange at Lincoln Center, the Serpentine Gallery, London, 123 DATA, Paris.

Hosted by Yang-Yu Liu

