Abstract: This talk will present applications of data science in architectural design and introduce my recent collaborative projects with data scientists at the University of Tokyo. Understanding correlations between architectural floor plans and their implicit qualities in a quantitative data format would be important in order to obtain deep neural networks that could extract features related to the attractiveness of building designs. As a prospective goal, we would like to scientifically understand professional decisions by architects that influence the quality of their spatial designs. The talk will also introduce several experiments on architectural design applying various computational tools.

Bio: The speaker, Taro Narahara is an Associate Professor at the Hillier College of Architecture and Design at NJIT. He holds a Doctor of Design degree from Harvard University, where he won the Peter Rice Prize, and an M.S. degree from MIT. His recent work in collaboration with data scientists at the University of Tokyo was awarded the MVE (Media Experience and Virtual Environment) award from the Institute of Electronics, Information and Communication Engineers (IEICE). He is a licensed architect in Japan and the state of New York and worked on award-winning projects such as the Mori Arts Center while he was associated with Gluckman Mayner Architects.