



Carnegie Mellon University

School of Architecture

College of Fine Arts, CFA 201

Carnegie Mellon University

Pittsburgh, PA 15213



A collage of a style transfer of LaToya Ruby Frazier, 'U.S.S. Edgar Thomson Steel Works and Monongahela River,' 2013, and Robert S. Duncanson, 'Landscapes with Cows Watering in a Stream,' 1871.

48-421/48-621: Beyond the Building's Footprint

Units: 9

Instructor: Zaid Kashef Alghata

This project-based seminar explores the use of machine learning and other software to create a speculative future for Braddock, Pennsylvania, a town just nine miles outside of Pittsburgh. To be mindful of the area's history and our engagement with it, we will study the work of LaToya Ruby Frazier to understand the social and ecological effects of steel extraction, emission, and construction. Frazier builds a visual archive of the intersection of the steel industry, the environment, and the human body, describing her work as excavations of hidden histories, from the micro to macro level.

Students are encouraged to collect data using photography, film, record sounds, 3D scanning, and taking drone footage of the site. The workflow will deploy generative adversarial neural networks, various 3D modeling, and rendering software. Students will produce a short animation for the final deliverable.

The seminar welcomes students with little or no experience with computation and those with more experience.