The following images are reduced reproductions of architectural boards presented to committee and jurors for review April 21, 2011
Imagine an industrial space for the digital age where architecture supports workers by "tuning" the forces of light, energy, sound and human presence.

Situated on the canals of Holyoke, Massachusetts, this re-use project animates a 19th century water-powered textile mill. The project aspires to an architecture more suitable to the digital age. Living, as we are, in a state of perpetual distraction, our need for architecture that grounds us has never been greater.

Using the computer as an analogy, the design aims to decode "place" and make it more tangible to building occupants.
The study site at 1 Bigelow Street is an existing 96,000 sq. ft. textile mill built prior to 1910.

The Farr Alpaca mills were among the 40+ factories and mills that operated along the city’s 3.5 miles of canals during the golden age of water power.

Today, Holyoke has 3 million square feet of unutilized industrial space and vast tracts of vacant land where decommissioned mills once stood.

Originally built as a sewing factory, the existing structure represents the peak of turn of the century industrial architecture. The original owner’s progressive attitude towards labor is evident in the extensive glazing system. The windows minimized eye strain on laborers who worked ten hour shifts, six days a week.

By 1940 electrification eliminated the need for natural light and the mill, under ownership of the US Army, was boarded up.
Preliminary study models show that the building reaps sunlight from the south and east. Material and precedent studies looked at ways of exposing the glazing system and marking the passage of time and seasons through the introduction of translucent layers.

March 1, 10am | June 1, 10am | Sept. 1, 10am | Dec. 1, 10am

Rather than eliminate the existing column system, the design explores different degrees of subtractions. Preserving the structural system, the masonry, and access to the canal helps to establish a link to the building’s industrial past.

Solid/void studies and program diagrams lead to the design of two volumes extending from a utility and service core towards the "ephemerality" of the southeast corner of the building.

A final design "recipe" demonstrates a design sequence.
“A Fablab can give its users the ability to locally conceptualize, design, develop, fabricate and test almost anything.”

- MIT Center for Bits & Atoms
MODELS

Material study, Dec., 2010
Concept model, Dec., 2010
Form study, Feb., 2011
Form study, Feb., 2011
2nd scale program/structure study, March, 2011
Circulation model, March, 2011
Program-distribution study, March, 2011
The ‘Krupcinski,’ a solid/void model, March, 2011
The first of three 1/6th scale models, March, 2011
Digital Model of Insertion, April, 2011
SITUATED ARCHITECTURE

Exterior Panels
Curtain Wall
Framing
Structural System

Curtain Wall Framing
Interior Panels

Hydronic Piping System
Conditioned Space Capillary
Hydronic System

LED Fixtures and motion sensors

WALL CONCEPT

Rendering of southeast solar hall way during morning light conditions.

Rendering of southeast solar hall way during evening conditions. Activity level in building determines wall color. Presence of bodies in the hall determines virtual shadow's movement.

Rendering of inserted wall system from within a classroom space.