IPRO 311
IIT Sustainable Branding

Final Presentation | Spring 2009

Introduction

The Problem:

Letter “D” grade on the College Sustainability Report Card

Lack of awareness of previous student contributions

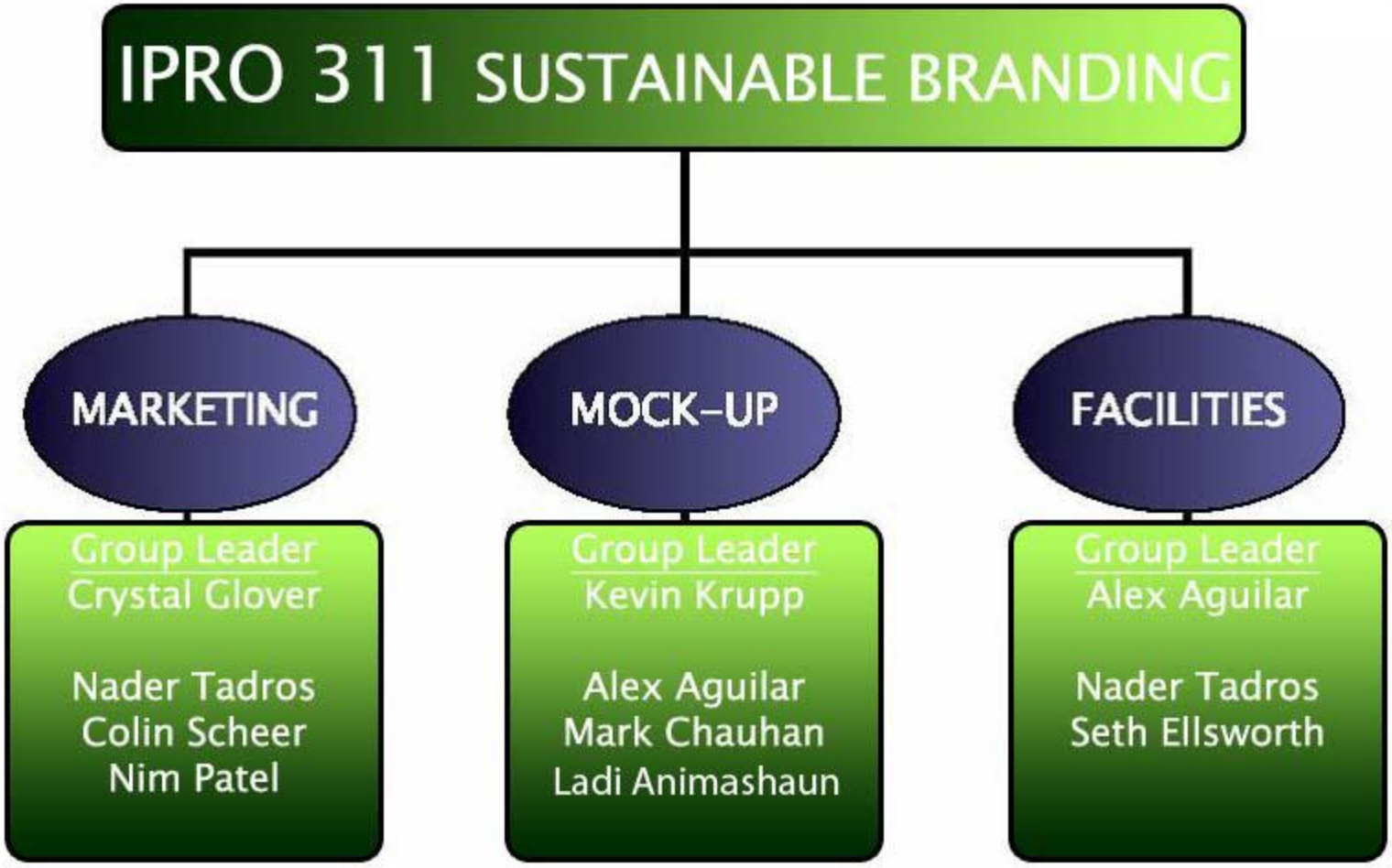
Introduction

Objective:

To enhance the Illinois Institute of Technology's image as an institution and make the campus more sustainable through the use of green technologies and efficient use of resources

To bring about awareness of IIT's commitment to sustainability throughout time and the important historical contributions of those affiliated with the university

Team Structure



Faculty Support: Nancy Hamill Governale, Rae Mindock, Ray DeBoth

Promotion

Recapturing IIT's History:

Purpose:
To find important contributions from IIT throughout the years

Tech News Collections

IIT Receives $44,000 NASA Grant For Study of Behavior of Liquid Fuels

Illinois Institute of Technology has received a $44,000 grant from the National Aeronautics and Space Administration grant will enable continue their in- the behavior of simulated rocket

Torda, the prin- on the project, of mechanical and neering. He said nable him to con- of liquid propel- pressure and high vironments. The to Oct. 31, 1967 uation of his pres- ong study.

Dr. Torda said, in- rmination of what id fuel under high high temperatures t motor. He and l continue to work alcohol, kerosene, pes of hydrocar- their experimenta- to properly isolate Dr. Torda and his ants have built a bers to cover vari- pressure and tem- d to carry out the

Explaining the various aspects of the experiment, Dr. Torda stated that the first experimental chamber utilizes high temperatures and relatively low pressures. A second chamber is equipped for 1000° temperatures and pressure up to 500 psi, while the third chamber allows experiments with up to 12,000° and 1,000 psi.

Under the new grant, Dr. Torda said, the researchers will build a wind tunnel where they will be able to circulate gases heated to 1,000° with a pressure of up to 1,000 psi and investigate the behavior of injected drops of cold liquid fuel—in effect, a "non-burning, closed circuit rocket."

Greener Bog?

Dear Editor:

I have been reading Technology News regularly like any good little Techhawk. In the April 18 issue I noticed an editorial wishing for a "green" bog.

Even my short residence at Technology Center has been long enough to teach me that things don't change quickly here. I can not say, however, that three weeks is such a short time. Even red tape has to give way sometime; that is, if anyone is bothering to try to remove the long scarlet strands that seem to prevent action.

I realize, also, that we are in the center of a city, and "grass just can't hardly be found nowhere in a city!" I understand that when we look upon the blight in the center of our "campus" we are supposed to dream of the new building to be placed there in the "near future" just as a good many people have been dreaming for a long time. I simply ask, how much longer? Is the expense of the grass so great as to explain the long time it is to take for this open wound to be healed?

Clifford Anderson

The former Wabash Ave. See page 2.

Wind Tunnel

new model wind tunnel the tunnel to make re-

IIT conducts annual power conference

During the last three days the Sherman Hotel has been host to the American Power Conference.

In 1953, the American Power Conference was organized by IIT, and various other universities and technical societies as the successor to the Midwest Power Conference.

The purpose of the Conference is to provide a national forum for the discussion of problems and for the exchange of information concerning matters of interest to the power industry and associated lines of endeavor. Water Resources, Industrial Steam and Power, Research in Steam Generators and Electronic applications and other topics will be discussed during this three day meeting.

The conference is open to all persons interested in the generation, transmission, distribution, or utilization of power. It will continue through this afternoon.

All the papers and addresses delivered at the conference are to be published in a cloth bound volume called, "The Proceedings of the American Power Conference." Copies of this volume can be ordered at the registration or by mail.

...l Is Put ...'s Lab

...ation in Dan Roe... to be inaugurated ...iero-wind tunnels ...h the help of some

Solar Architect Harnesses Sun As Winter Fuel, Study Finds

That the world's oldest heating unit—the sun—may be harnessed successfully in the post-war building era to serve as the newest auxiliary source of winter warmth, and thereby reduce fuel bills, was indicated in the results of a study of a "solar house" made public last week by Dean J. C. Peebles and William C. Knopf, Jr.

The report consisted of the findings of a year's study made by Dean Peebles and Knopf, a graduate fellow who supervised the project, in cooperation with the Libbey-Owens Ford Glass Company. It brought out that the rays of the sun, filtering through multiple-glazed windows which sandwich a sealed-in, dehydrated air space between panes to form a type of glass known as thermopane—supplied enough heat, even in sub-zero temperatures, to make it unnecessary to use the heating plant during daylight hours.

The net cost of heating the "solar house" was reduced approximately one-third by utilizing the rays of the sun, the report revealed.

As an example, a chart in the report cited one January day when the outside temperature ranged from 6 degrees below to 17 degrees below zero. Sun entering the living room automatically shut off the furnace at 8:30 a.m. The interior temperature during the day ranged above 85 degrees, at times necessitating the opening of windows despite the fact that the furnace was not in operation from 8:30 a.m. to 8:30 p.m.

The studies were made in the home of Mr. and Mrs. Hugh C. Duncan of Homewood, Ill. The home, one of several designed by architect George Fred Keck, a pioneer in modern solar design, was selected because it represents the so-called "popular price" bracket of $10,000 or less, having been built for $7,050.

The house, which architects believe may be a forerunner of an important development in home construction, is a one-story single-slope frame structure with flat-pitched roofs over the main body and wings. The roofs are placed so that the low-hanging winter sun penetrates deeply into the principal rooms of the house, while in the summer months the windows are fully shaded.

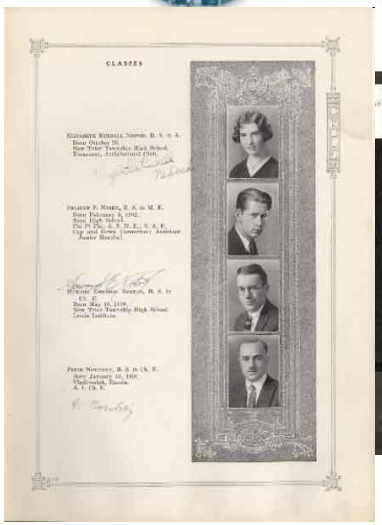
In addition to being pleased with reduced fuel costs, the Duncans were enthusiastic about the increased sunlight and the sense of spaciousness resulting from the wide window areas, reported Dean Peebles. They stated that at no time during daylight hours was artificial light required in any part of the house, no matter how remote from the windows.

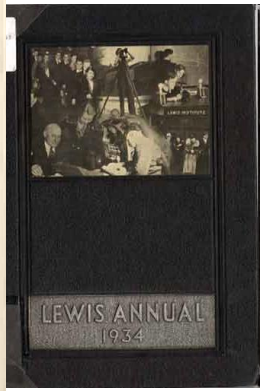
Promotion

Recapturing IIT's History:

Press Releases

List of Alumni Names





	A	B	C
35420	Palandech	Douglas	Palandech, Douglas
35421	Palandech	George	Palandech, George
35422	Palani	Senthil	Palani, Senthil
35423	Palaniappan	Ramanathan	Palaniappan, Ramanathan
35424	Palaniswami	Shanthakumar	Palaniswami, Shanthakumar
35425	Palanyk	Terence	Palanyk, Terence
35426	Palaro	Eric	Palaro, Eric
35427	Palasz	Robert	Palasz, Robert
35428	Palatinus	John	Palatinus, John
35429	Palatinus	Joseph	Palatinus, Joseph
35430	Palcowski	Richard	Palcowski, Richard
35431	Paldan	David	Paldan, David
35432	Palecha	Nitin	Palecha, Nitin
35433	Palella	Joseph	Palella, Joseph
35434	Palen	Matthew	Palen, Matthew
35435	Palen	Roberta	Palen, Roberta
35436	Paler-Amaya	Catherine	Paler-Amaya, Catherine
35437	Palermo	Mario	Palermo, Mario
35438	Palermo	Ronald	Palermo, Ronald
35439	Palesh	Cheryl	Palesh, Cheryl
35440	Paletta	Eleanor	Paletta, Eleanor
35441	Palfenier	Michelle	Palfenier, Michelle
35442	Palffy	Fred	Palffy, Fred
35443	Palikevicius	Sarunas	Palikevicius, Sarunas
35444	Palivos	George	Palivos, George
35445	Palivos	Peter	Palivos, Peter
35446	Paliwal	Vishalini	Paliwal, Vishalini
35447	Paliwala	Mazhar	Paliwala, Mazhar
35448	Palki	Chakrabarti	Palki, Chakrabarti
35449	Palko	Joseph	Palko, Joseph
35450	Palkovich	David	Palkovich, David
35451	Palla	Nagaraju	Palla, Nagaraju
35452	Palla	Ramesh	Palla, Ramesh
35453	Palladino	Nicholas	Palladino, Nicholas
35454	Palladino	Roseann	Palladino, Roseann
35455	Pallandt	Cyrano	Pallandt, Cyrano
35456	Pallasch	John	Pallasch, John
35457	Pallaver	Matthew	Pallaver, Matthew
35458	Palle	Suresh	Palle, Suresh
35459	Paller	Harry	Paller, Harry
35460	Pallesen	Lynne	Pallesen, Lynne
35461	Pallme	Edward	Pallme, Edward
35462	Pallot	George	Pallot, George
35463	Palma	Francis	Palma, Francis
35464	Palma	Jennifer	Palma, Jennifer
35465	Palma	Vladimir	Palma, Vladimir
35466	Palmberg	Terry	Palmberg, Terry
35467	Palmer	Aaron	Palmer, Aaron
35468	Palmer	Allyson	Palmer, Allyson
35469	Palmer	Annelie	Palmer, Annelie
35470	Palmer	David	Palmer, David
35471	Palmer	David	Palmer, David
35472	Palmer	Douglas	Palmer, Douglas
35473	Palmer	Dwight	Palmer, Dwight
35474	Palmer	Edward	Palmer, Edward
35475	Palmer	Gregory	Palmer, Gregory
35476	Palmer	Guillermo	Palmer, Guillermo
35477	Palmer	Jared	Palmer, Jared
35478	Palmer	Jason	Palmer, Jason
35479	Palmer	Percy	Palmer, Percy
35480	Palmer	Roy	Palmer, Roy
35481	Palmer	Sherry	Palmer, Sherry
35482	Palmer	Tammy	Palmer, Tammy
35483	Palmisano	Anthony	Palmisano, Anthony
35484	Palmisano	Christopher	Palmisano, Christopher

Promotion

Recapturing IIT's History:

12.17.1957
IIT installs new central transformer to increase energy efficency and cut power costs.

10.24.1961
IIT creates new, more efficent fuels cell for military and space use.

12.13.1961
IIT develops a low-cost, lightweight ceramic building material from fly ash.

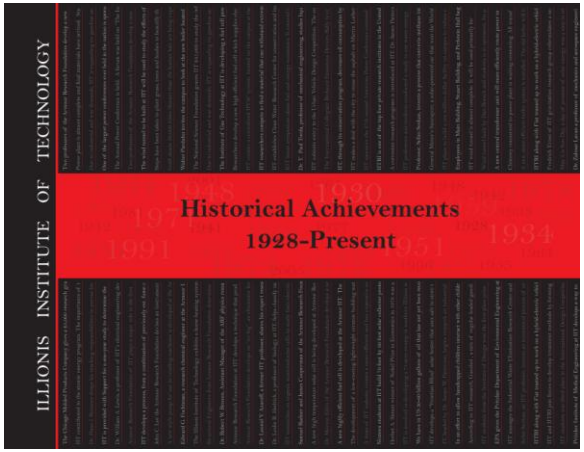
04.24.1978
IITRI-Fiat develop criteria for hybrid-electric vehicle.

11.11.1988
Pritzker Institute of Medical Engineering developing an implant for computer directed therapy.

02.02.1991
IIT wins 3rd Place in Natural Gas Vehicle Challenge

04.22.209
IIT announces plan to becom enation's most sustainable institution.

1940 1950 1960 1970 1980 1990 2000



Promotion

Chicago CCGT Exhibition:

Purpose:
To expand knowledge of IIT's accomplishments to the greater city and establish

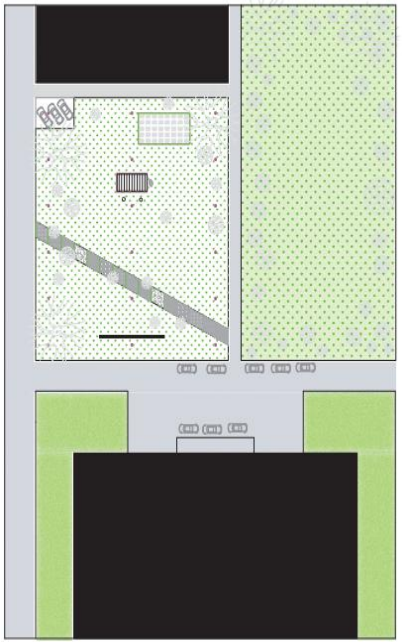
Display an explanation of IIT's student driven efforts, IPROs, and the IPRO program on CCGT grounds

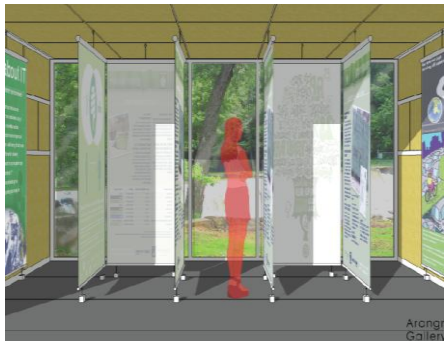
Expected display date:
May – June 2009

Education

Sustainability Park

Purpose:
To create a highly visible area on campus where students and visitors can learn about sustainable solutions and related IIT developments

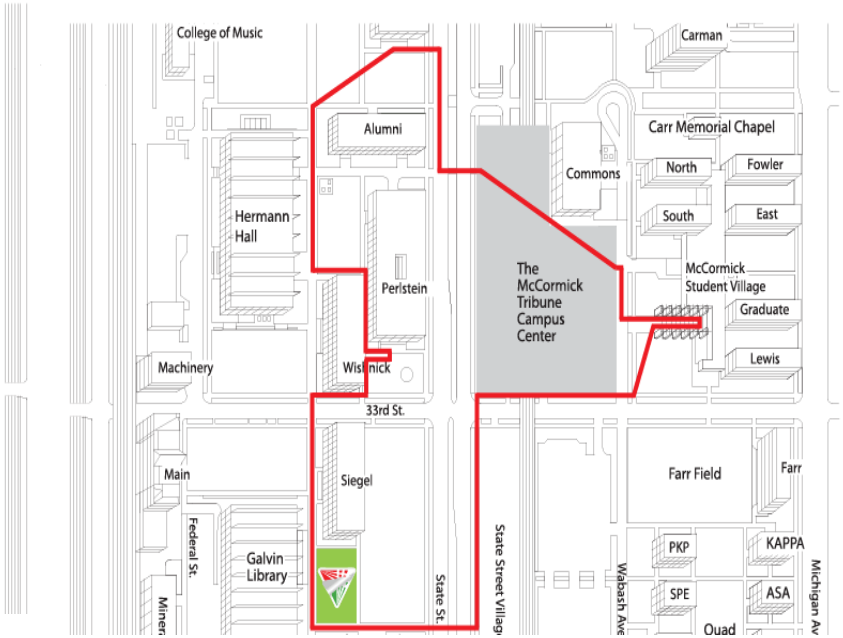




Education

Sustainability Park

Placed on the campus tour , the park would be visible to all campus visitors, including visiting and prospective students



On-site examples of sustainable products including green roofs and permeable paving

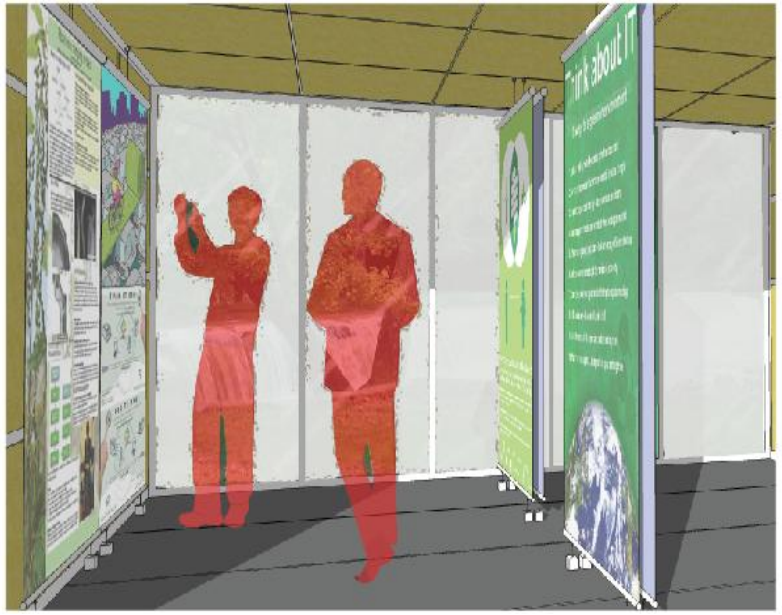
An exhibition space to give students a hands-on learning environment

Education

Sustainability Park

Off-grid exhibition space allowing students to learn about new developments at IIT

Encourage future research and student-based experimentation

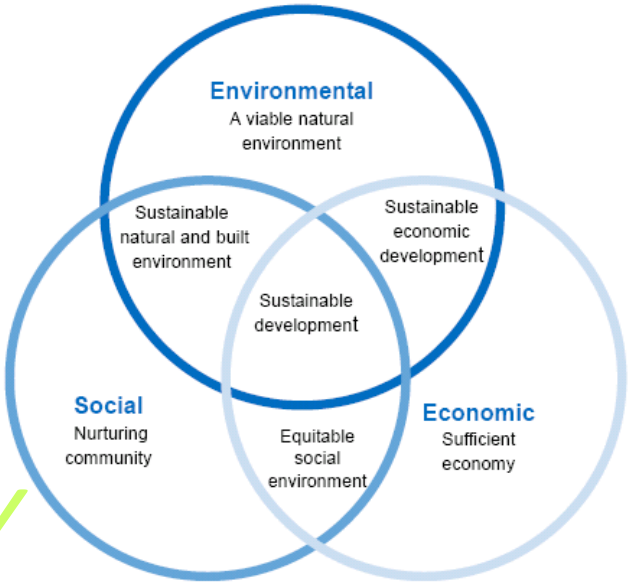


Will improve the site atmosphere and create a much needed student relaxation space in a comfortable atmosphere

Education

Sustain-Your-Ability

Purpose:
To present sustainable solutions to be incorporated in every day life



SUSTAIN-YOUR-ABILITY

Education

Sustain-Your-Ability

Compilation of Past and Present

Micro Level Sustainability

Macro Level Sustainability

Recommendations

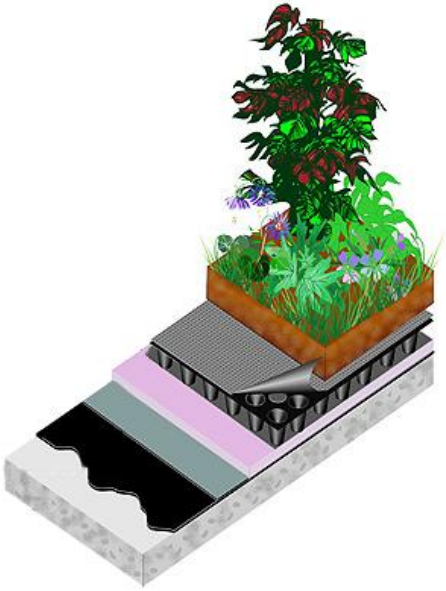
What You Can Do

Campus Master Plan & *Sustain-Your-Ability*

Experimentation

Permeable Paving:

An experiment to test and determine the porous qualities of different types of permeable paving and their potential applications on campus



Experimentation

Rain Sensors Tests:

With new facilities efforts geared towards

Additional Note: This has opened up a dialogue with the new facilities head Kevin Gallagher

Additional Accomplishments

CGCT

- Contact
- Our Sustainability Excursion

Facilities Head

- Kevin Gallagher

Sustainability Department

- Joseph Clair
  - Campus Master Plan
  - Master Plan & Sustain-Your-Ability

Conclusion

Challenges & Obstacles

Difficulties gathering information from the IIT archives

Effectively & creatively presenting information

Communication with outside sources

Length of the semester

The Team

- **Alejandro Aguilar**
  4rd Year Architectural Engineering
- **Oladipo Animashaun**
  4th Year Architecture
- **Mark Chauhan**
  4th Year Mechanical Engineering
- **Seth Ellsworth**
  4th Year Architecture
- **Crystal Glover**
  4th Year Architecture
- **Kevin Krupp**
  4th Year Architecture
- **Nim Patel**
  3rd Year Biology
- **Colin Sheer**
  3rd Year Humanities
- **Nader Tadros**
  4th Year Architecture
- **Nancy Hamill Governale**
  Advisor
- **Ray DeBoth**
  Assistant
- **Rae Mindock**
  Assistant

Thank You

Questions?