IPRO 330

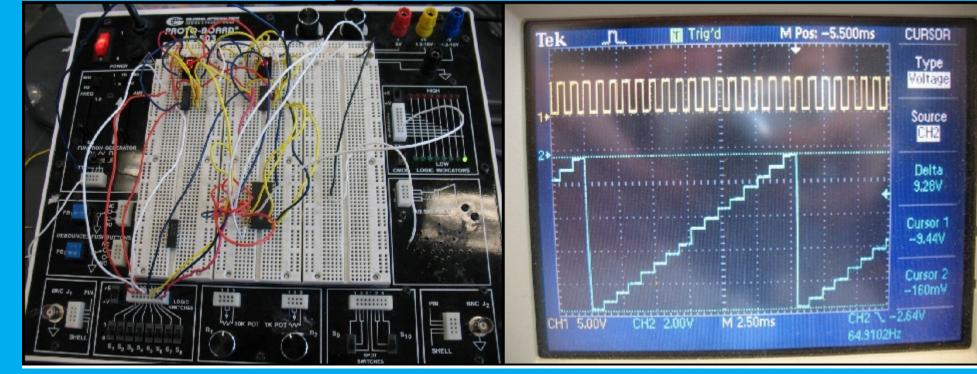
Science Fair Extravaganza http://sciencefair.math.iit.edu

Problem Definition

- •Deficiency of resources available to Chicago Public Schools (CPS) students in executing their science fair projects
- •Limited practical experience in performing lab techniques
- Lack of quality and originality in science fair projects

Objectives

- •Increase interest in math and science among CPS students
- Prepare students for careers in STEM
- •Giving students experience in the process of scientific investigation



Approaches

- The team was divided into two groups: one group focused on writing grant proposals to build an on-campus learning center aimed towards providing CPS students with resources to participate in exciting lab activities revolving around STEM; the second team focused on evaluating effectiveness of the website
- Members of the team attended and judged CPS science fairs
- Teachers were surveyed for impressions on the website and possibility of an on-campus learning lab facility intended for CPS students



Website Maintenance Team

- Eugene Lamie, Anil Vasireddi, Yaofu Zhou
- •Reviewing, editing, finishing up the website
- •Perform evaluation of the website through usability testing to complete development cycle
- Compiling a usability report and making appropriate changes to the website based on findings

Grant Proposal Team

- •Kenneth Boubel, Satchal Erramilli, Rick Matusiewicz, Samuel Nemanich, Edgar Palacios, Kyle Pinsonneault, Joshua Tate
- Writing grant proposals to get funding for on campus learning lab
- •Making contacts with schools, on campus, and with funding agencies to assess interest in learning lab
- •Developing a curriculum for use in learning lab



Current Goals

- •Make a complete evaluation of the Science Fair Extravaganza website based on the results of the usability test
- •Make necessary modification to the website according to the evaluation
- Submit grant proposal for learning lab

Future Goals

- Submit additional grant proposals
- Establish and sustain funding for a math and science learning center



About us

- The team is composed of students in math, science and engineering majors
- The team is committed to help CPS students in science and math by supporting CPS science fairs and providing laboratory experience
- •Overall team leader: Samuel Nemanich
- •IPRO advisers: Prof. Gregory Fasshauer, Prof. Michael Pelsmajer