Building Bridges:

Underrepresented Engineers, Employers, and Club Participation

Identifying Our Issue

There is a huge representation gap in the STEM field.

- Underrepresented engineers earned only 4.3% master degree and 4.9 % doctorate degree in the engineering field[1]
- Structural biases: minority students face additional barriers in engineering that distract from academic and professional success.
- To close the existing gap, we need to increase opportunities to develop allyship within the field.
    - Mentorship, student sense of support, and acknowledgement of issues of underrepresentation all improve minority student retention professionally and academically.

1. Report: Minorities Underrepresented in Earning Engineering Degrees *Wood, Sarah (2011)*

Motivation

>> “Your team did such great work in Concrete Canoe, how did you hear about it?”

>> “A friend of mine invited me to the meetings!”

>> “I’m an Civil Engineering undergraduate, my advisor recommended I compete.”

- **Participation in large UW competitions is powerful:** can be leveraged to secure job interviews and to improve engineering skills.

- **The network of participation is localized**: yet, students of disparate and underrepresented backgrounds are interested in these opportunities as well!

Proposal: Team-Forming Mixer + Showcase

Who:

- **Industry Sponsors**: company seeking to hire engineers of varied backgrounds
- **Competitive organizations** seeking to build teams for their competition cycle
- **Members of minority interest orgs**. for engineers (SWE, NSBE, SHPE, STARS)

What:

- Team-Forming Mixer event with Sponsor engineers present. *(Fall)*
- Showcase Evening to highlight project successes in front of sponsors. *(Spring)*

Project Timeline

Fall

Team Formation Mixer

1. One-evening jigsaw-style team challenge.
2. Student org debriefs.
3. Interested student sign-up symposium.

Winter-Spring

Competition Season

With diverse teams recruited from Fall mixer, students compete in their respective competitions.

Early Spring

Team Showcase

1. Industry sponsors invited to attend showcase.
2. Students present the successes from competition, opportunity to share progress with recruiting engineers.

Ideal Outcomes - Does Everyone Benefit?

Student-Group Benefits:

- Introduction to clubs/groups who could provide relevant skills or experiences
- Jump-off point for getting a foot in the door with companies

Club/Team Benefits:

- Opportunity to meet with potential sponsors
- Chance for to meet/recruit new members from relevant majors
- Platform to showcase the club's work in front of students and sponsors

Industry Sponsor Benefits:

- Exposure to projects that may align with company's focus
- Connections to students from diverse backgrounds
- Foundation to establish pipeline/presence to future engineers