### Project Title:

The PIT-UN Undergraduate Informatics Education for Public Interest Technology Conference

## Principal Investigator:

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### Collaborators:

From The University of Texas at Austin: Amelia Acker and Eric T. Meyer From The University of Michigan: Patricia Garcia, Casey Pierce, and Kentaro Toyama

1 Summary of key findings/results

# Public Interest Technology University Network (PIT-UN) Conference on Undergraduate Informatics Education

Held on the University of Texas at Austin's campus on March 3-4, the inaugural Public Interest Technology University Network (PIT-UN) Conference on Undergraduate Informatics Education brought together educators from across disciplines to explore how to prepare undergraduate students for careers in the public and non-profit sectors, and serve the public interest, particularly in support of social justice. The 1.5-day event included stimulating presentations and discussions that helped define what undergraduate education for public interest technology looks like and shared best practices and pedagogies for undergraduate informatics education.

Conference participants came from 35 universities and colleges (including major public research universities, minority-serving institutions, polytechnic universities, community colleges, and Ivy League schools) as well as companies, non-profits, and government institutions. The keynote speakers were Cecilia Muñoz, Vice President, Public Interest Technology and Local Initiatives, New America; Stephen Elkins, Chief Information Officer for the City of Austin; and Meredith Ringel Morris, Senior Principal Researcher & Research Manager, Ability Research Group at Microsoft Research. Session topics included health informatics, information literacy, curriculum development, sociotechnical innovation, public policy, ethics education, and much more.

Shreya Chowdhary, Emma Pan, and Sam Daitzman, students from Olin College who presented during one of the conference paper sessions, wrote: "As students, this experience was even more valuable, because we were exposed to new viewpoints and approaches from other institutions, *and* from public interest technologists of different academic backgrounds and at different stages in their careers. The conference was an incredible reflective and learning experience for us."

- 2 Background and Problem Definition
  - a. What was the project's main objective?

We proposed to convene a conference focusing on how undergraduate informatics education aligns with public interest technology, bringing together scholars from a diverse range of fields and backgrounds with a shared interest in Public Interest Technology and undergraduate education. b. What was the initial problem you wanted to solve?

There are limited opportunities for Public Interest Technology educators to build community and learn from each other.

c. Who/what are other individuals or institutions working on similar projects?

Our conference was able to bring together Public Interest Technology educators from thirty institutions of higher education:

Albany Berkeley Buffalo CSU-Fresno Carleton CMU Colorado CUNY Dominican Emporia State Florida State Howard Huston-Tillotson Illinois Irvine Kennesaw State Maryland Michigan MIT North Carolina NYU Olin Pittsburgh Rutgers South Florida Tennessee Texas A&M Texas Woman's UT-Austin Washington

d. Did you work with other teams or institutions? If yes, how?

Yes, our conference was a collaboration between The University of Texas at Austin and The University of Michigan. The University of Texas at Austin played the lead role in the conference organization, and we co-organized the plenary discussions with our colleagues from Michigan.

e. How did you define diversity, equity and inclusion with respect to your work?

We defined diversity as ensuring participation by individuals from groups underrepresented in technology (e.g., women, African-Americans, Latinx, Native Americans, LGBTQ+, individuals with disabilities, first-generation college students, veterans); by individuals at various stages in their careers, with emphasis on early-career educators (e.g., doctoral students, postdoctoral fellows, junior faculty); and by individuals from a wide range of institutions, including minority-serving institutions (e.g., HBCUs, HSIs, TCIs), women's colleges, and community colleges. We defined equity as working to level the playing field, which we did by funding travel for 20 individuals in the above categories. We defined inclusion as providing an open and inviting environment for sharing ideas and perspectives free from any form of hate or discrimination; we ensured that all activities and technologies were designed to be universally usable.

- 3 Development
  - a. How did you first approach the project?

Given the timing of the funding notification, we knew that we needed to act quickly to organize the conference, including mundane logistics such as finalizing the conference venue, finding suitable dates, and negotiating the contracts. Our selected venue, the AT&T Hotel and Conference Center, had very limited date options, and had four options: two in January and February that we dismissed as too short of a turn-around to pull off the conference, one in April that we dismissed because it overlapped with the planned dates for a major conference in our field, CHI, and one in early March that seemed ambitious but doable. At the time, our main concern for haste was that, climate wise, Austin, Texas is a more attractive destination for most Americans to visit in the winter and early spring than in the summer. We then moved to setting up the conference website. Once that was set up, we advertised the conference broadly using listservs, social media, and personal contacts. After the deadline, we reviewed the travel fellowship applications and conference presentation abstracts (we allowed participants to submit papers, panels, or posters). We had a large number of both, and were forced to be selective, and we applied the planned diversity, equity, and inclusion criteria to our decisions on the travel fellowships. We lined up the keynote speakers and organized the discussion sessions following each keynote. We then were able to successfully execute the conference.

i. What were the intended methods and processes you wanted to use?

We wanted to select the highest-quality presentations and the worthiest travel fellowship winners. We count ourselves as successful on both counts.

b. What changes did you make to the project?

We had originally planned to create an online forum for interaction before and after the conference. We found that the conference website platform that was recommended to us was not easy to configure in this way, and that we were already stretched to our limits to pull off the inperson conference under the required timeline. We had also planned to survey participants following the survey to request them to evaluate the survey. However, given the timing of the shutdown of most of the US soon after the conference, we did not want to overburden them. i. How did you adapt to any changes in circumstances for the project?

The biggest change of circumstances was the pandemic. We had two or three attendees cancel due to the health concerns related to the pandemic. We were not sure, if we postponed the conference, when we would be able to hold it, and at that time there was no community spread in Austin and still a limited number of known cases in the US, so we went ahead with the conference.

c. How did you evaluate the success of the project?

We wanted to attract at least 100 conference attendees. We did indeed have more than 100 conference attendees. We wanted to attract participants from a wide number and diverse range of educational institutions. Our participants came from 30 institutions of higher education, including 10 PIT-UN members (33%) and 6 minority-serving institutions (2 HBCUs and 4 HSIs, 20%). Instead of conducting a formal survey after the conference, we asked participants about their feedback during the conference, and the feedback that we received was unanimously positive.

N/A

- 5 Lessons learned
  - a. How would you summarize your insights?

The breadth of Public Interest Technology education approaches was staggering. Certainly some themes emerged, such as an emphasis on service learning, the use of case studies, and proactive consideration of the ethical implications of information technologies.

b. What specific advice would you offer to other members with regards to this project?

We would probably offer some cautionary advice about trying to organize a conference on such short order with such a limited budget. We would definitely recommend considering something along the lines of our travel fellowship program, as it clearly augmented the breadth of representation at the conference and was highly beneficial to the attendees; for some, it was their first professional conference.

- 6 Possibilities to replicate
  - a. How can other members replicate the project, or part of the project?

We had hoped that this might become an annual conference and had discussed informally potentially hosting the next conference in Ann Arbor. However, under the current pandemic circumstances, we are uncertain when it would be possible to safely organize an in-person national conference. Further, we have participated in enough poorly executed virtual conferences that we are dubious about the potential to execute a successful virtual conference on such a shoestring budget.

b. What considerations should other members have when approaching your challenge?

Keep in mind that organizing a conference is a lot of work!

- 7 General Information
  - a. Who can be contacted to get more information?

# PI Kenneth R. Fleischmann (kfleisch@ischool.utexas.edu)

b. What is the current state of the project?

We were fortunate to identify a new collaboration opportunity through the conference based on two conference panels, one featuring presenters from Huston-Tillotson University (a local HBCU), Capacity Catalyst, and MEASURE (the latter two being social justice-oriented nonprofits) and another organized by the City of Austin. Thus, we put in a follow-up proposal across the five organizations for the PIT-UN Y2 call. We are very excited about this collaboration opportunity.

In addition, the project was extremely valuable in helping our faculty prepare to launch our new BA/BS in Informatics degree programs, which will be the first undergraduate degree offerings for the UT-Austin iSchool. We are particularly excited about our Social Justice Informatics concentration, and we are currently conducting a faculty search for an Assistant Professor in the area of Social Justice Informatics.

- 8 Annexes & Publications
  - a. Please attach copies of any media or publications regarding this project.

Please find attached the conference program.

### Certification:

All The University of Texas at Austin activities were and are consistent with charitable purposes under Sections 501(c)(3) and 509(a)(1), (2) or (3) of the Internal Revenue Code, and The University of Texas at Austin complied with all provisions and restrictions contained in this Agreement, including, for example and without limitation, those provisions related to lobbying and political activity.