## PITCases.org end of grant narrative summary

Margaret Hagan, Stanford University

## **Summary**

The Public Interest Technology University Network case study platform, or PITCases.org, is a hub website that came out of our grant within the PIT-UN network. This narrative report summarizes the key findings from our process & launch of the PITCases.org case study platform.

Our team at Stanford, Howard and Georgetown, collected case studies of what public interest technology looks like in the university setting. This included profiling classes that taught diverse types of students about how to practice public interest technology. It also includes the student projects that emerged out of classes and how these projects, in some cases, became real world initiatives to make real-world solutions. The PITCases.org platform also gathered together discrete resources, like reading lists, syllabi, and other materials that can be useful to teachers and students of PIT-oriented classes.

With the support of the PIT-UN grant, our multi-disciplinary and cross-university team was able to establish the key functions of this platform, the templates by which to communicate the information, and the information architecture of the platform. We then handed off the URL, content management systems, cases, and content assets over to the New America team for them to expand the platform with even more features. We are proud to have established the platform that will continue to grow.

## **Background and Problem Definition**

The project's main objective was to make an easily accessible, online collection of examples of what 'public interest technology' looks like in the university setting. When we set out on the initiative, there was some confusion among university colleagues about what 'PIT' meant, especially from students and teachers who hadn't directly practiced in this area.

We identified that there was an opportunity to make it clear what 'PIT' is, by showing case studies of how those in different institutions and academic fields did public interest technology work. We had three key audiences for the platform: teachers, students, and supporters of university initiatives.

Students had some confusion about what it would mean to take a 'public interest tech' class -or they may have never hears of this field of the work. The goal of the platform was to showcase
case studies of public interest technology classes, and student projects. A student could then
read up on what these kinds of courses might be valuable to them. Or they could consult the
platform when they were in their course, during their project work, and thinking about what kind
of project they could develop in their team.

Teachers, too, could look at the platform to see how other instructors in different schools and academic settings created courses around public interest technology. The platform could show examples of what others included as readings, how they structured their projects, how they carried out grading, or how they taught ethical and social concerns around public interest technology work.

Funders or other supporters of PIT initiatives could look at the platform to see how public interest tech work delivered value for educational and social impact purposes. Through the case studies, these supporters could see examples of skills being developed in courses and projects being created with partners. The platform could make PIT work more concrete and specific.

Public interest technology work can feel amorphous because it happens differently in different academic disciplines, its classes can be titled differently, and the project work may vary depending on the partner. Our team was motivated to make sense of these disperse activities, classes, and projects -- to make a platform that was easy for our target users to find, use, and understand the value of PIT and how it could fit into their work and education.

We're not aware of any other similar platform. We did recognize that there were articles and summaries of public interest tech work on New America's website and some news publications. We wanted this PITCases platform to complement their efforts, and ideally to integrate into their websites (as happened). We also recognized that there were individual instructors or labs that had online resources, like open-access class pages, portfolios of past projects, or post-class write-ups. The goal with our platform was to be a central repository that would link to these individual pages, and bring the various efforts into a structured and consistent architecture, to make it more discoverable and easier to engage with for people who were trying to explore this field.

We intentionally created a team from several different universities and different discipline backgrounds. At Stanford University, we had core partners in sociology and at the law school, both of which ran public interest tech-oriented research labs. At Georgetown, our partners were based at the Law Center, though with close partnerships with colleagues working in data science and computer science. At Howard University, our partners were based at the Department of Electrical Engineering and Computer Science. We wanted to make sure that our team was diverse, in order to scout case studies and develop usability plans for different kinds of university practitioners and students.

With this diverse team defining the vision and operations of the platform, it would not be overly customized for one discipline (like law or computer science), but rather be adaptable to many different topic areas and ways of teaching. We also wanted to feature projects that were from diverse student teams and with partners that were values aligned to civic challenges, diversity, equity and inclusion values. We wanted to make sure that the case studies on the platform represented the key civic, public interest values at the heart of the project.

## **Development**

We started development by getting our tech infrastructure. We registered a short, memorable URL domain: Pitcases.org, that could be the address for the platform. We chose to use Wordpress as the content management system, because it is flexible, widely-used, and easy to use for non-coders (like authors or editors). Our goal was to develop the prototype of the platform but invest in the right technical setup that could grow and adapt as the exact design took shape.

For content for the platform, our initial approach to developing the platform was to contribute case studies from our different institutions, to then be able to find the right pattern to follow. By authoring first case studies from groups inside our own institutions or within the PIT-UN network, our team could establish first drafts on how to write a case study. We initially thought that there would be one type of case study template: with a background section describing the setup for the project or the class, then a description of the actions taken by the teaching or student team, and then lessons learned and discussion questions around ethical or social challenges that emerged from it. Our inspiration was business school case studies that have similar lengths and structures.

This type of case study would be substantial enough to be used in classes, as background reading to understand what the problem and solution looked like in the public interest technology field. Students could use the case studies to think through parallels to their own work, and also critically engage with the limits, possible harms, and trade-offs involved in public interest technology work. But the case study would also be short enough to also explain to people browsing through the PIT landscape, to understand how this work played out.

Our team set about finding projects at each of our universities to your profile in this way. We spoke with fellow professors, people in the New America team, colleagues from the PIT-UN network, and past and current students in our own classes. Even if people did not explicitly label their class or project as 'public interest tech', we were able to identify themes that would be within the PIT field.

In our core team, we hired research assistants to help us schedule and run interviews to gather case study content. We interviewed the students and teachers about the arc of their class and the projects within them. We covered how they engage with their partner, what research they did to effectively scope the challenge, how they did design and development work, and what refinements and iterations they made to get to an overall proposal. If the teams did in fact, go beyond the class to launch the pilot, we talked with them at length about how they made this transition, what challenges they had to overcome and other critical and ethical concerns they had to deal with.

After the interviews, our core team wrote up their answers into the structure templates and put them on the website. The website was not publicized yet, but we wanted to show how the case study content would appear to the user. We shared the website-hosted case studies with people in the network for their feedback for refinement.

During this process, we learned it was important to have images and other very descriptive and illustrative content along with the text content. The narratives could be quite lengthy, we wanted to make sure that the audience would be able to engage with it. We also learned we needed to structure the content for a web browser experience (rather than a text-only PDF or word-doc) with prominent headers, page jump links, and boxed content. We wanted to make sure that for those members of the audience that wanted to dig deeply into the case study and learn all of the details, they would have that opportunity. But for other types of audience members who wanted more of a quick summary of how the project worked and what outcomes it reached, that they would be able to gather that quickly and effectively. We identified a theme and set of plugins on the WordPress platform that let us establish this template style and then easily lay out text, images, links, and other structural things to make it easy to browse and navigate.

After we wrote a few of these case studies, we realized that we might need a few different variations of templates for cases. For a student project that grew out of a university course or a public interest tech after-school program, our original case study template worked well.

But we realized that we needed to adapt different templates to account for more teacher- and planning-oriented content. We realized that that template we had drafted for student projects did not necessarily effectively cover a teacher's point of view in setting up a class. If we wanted to demonstrate public interest tech to more professors, including those unfamiliar with PIT, then we needed to present content to make it easier for them to not just understand the narrative of a single class and emergent product -- but to have very practical content to help them adapt their current course offerings or create new courses focused on PIT.

This type of content was less of a project narrative, and more of a teacher's account of how they set up a class, what readings they chose, how to strategically set up partnerships for student teams, how to identify and scope challenges for the student teams, and how they facilitated class week. This type of content might also include class descriptions and resources that were not for the typical project-based class. If most PIT classes involved student teams working with a public interest partner, we also observed other PIT-related courses that were more set up as seminars or guest speaker series. We wanted the platform to showcase these various course types and the resources other teachers could use to establish them in their own school.

This meant a mixture of a narrative and a repository. We still interviewed the teachers, staff, and students involved in these classes. We adapted the original template to account for the teacher's planning and execution of the class. The team also worked with the case study teachers to find, refine, and share materials from the class that they had used to get it listed and carried out. We want to help future teachers to jumpstart their own PIT offerings using this case study narrative and repository of resources. Based on our testing and feedback, we heard that many teachers wanted examples of reading lists, course weekly plans, grading schemes, example briefs from partners, and guidance on how to make a partnership with a government or nonprofit agency. Based on that, we refined our template and our site menu's and architecture, to spotlight these teacher and classroom resources.

In addition to presenting content we curated, we also created a signup form to offer a case study. We asked for a short set of responses that could help us get the basic details -- but then

would follow up with interviews to get the full narrative. When we had a longer form, we heard from respondents that it was too burdensome to answer the lengthy questions.

We also made it possible to download the case studies as well-formatted PDFs, because we heard from teachers that they wanted to be able to print them off easily to distribute for class readings.





# **Possibilities to Replicate**

The PITCases.org site was built with scale and replication in mind from the beginning.

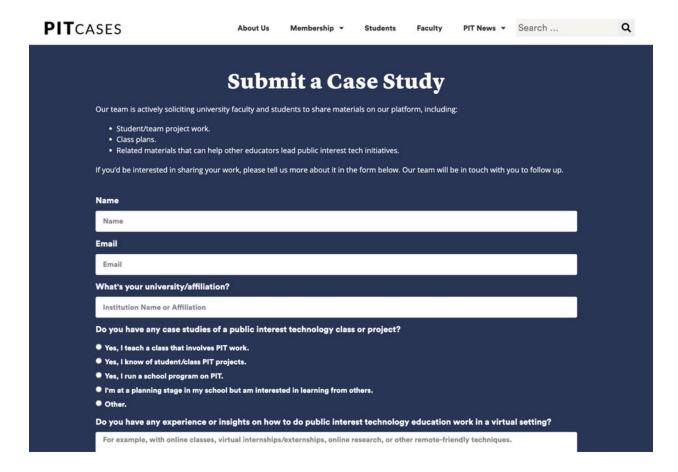
We wrote a range of case studies for the initial version of the platform, before we handed PITCases.org over to New America. Most of these profiled classes and projects that started within the PIT university network. But the established templates and guides can then be used

more broadly to document how any university or college that is teaching in this way or has student projects that are linked to public interest technology.

## **General Information & Annexes**

The PIT Cases platform is currently at its original URL, with updated and additional content from the New America team at pitcases.org.

See the overview of case studies and functions here:



### **Case Studies**

Each case includes details about the process, resources, learnings, outcomes, and reflections on a public interest technology project.

Take a lack into Public Interest Technology projects led by PIT-UN members and grantees to learn from their experiences while advencing the field.

Search Case Studies...



### Career Pipeline & Placement

#### **Educational Offerings**

### Strengthening the PIT University Network

### Faculty & Institution Building

Find innovative projects with the aim to empower PIT faculty and institutions

### **Technology Case Studies**

Discover the latest case studies from the Public Interest Technology University Network

Search Case Studies...

Career Pipeline & Placement

**Educational Offerings** 

Faculty & Institution Building

Strengthening the Public Interest Tech University Network





Meaningful Cultural Representation in STEM Curriculum

Aprl. 22, 2021.



**Boston Police Department Court** Overtime: Data science for

O April 8, 2021



Conducting Online Ethnographies During the COVID-19 Pandemic

O April 6, 2021

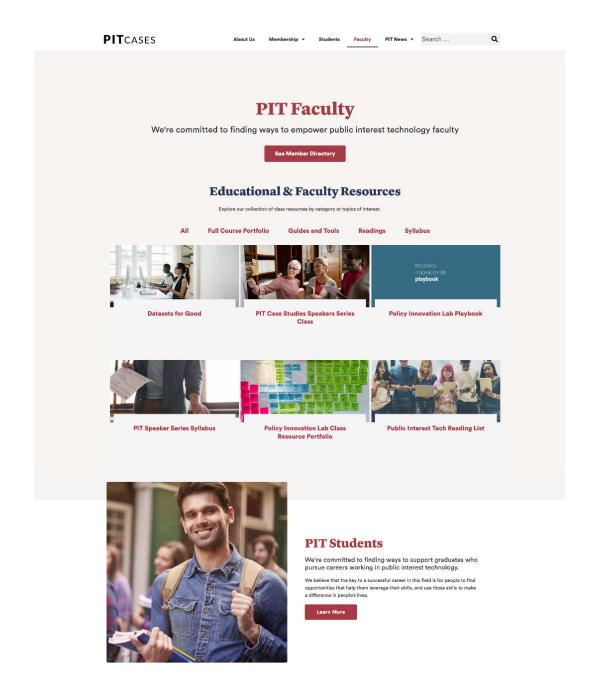


O December 16, 2020



Landslide Mitigation and Prediction

October 26, 2020



All Stanford University 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 Stanford University complied with all provisions and restrictions contained in this Agreement, including, for example and without limitation, those provisions related to lobbying and political activity.