Report for **Seeding Public Service in Tech: MIT Social Impact Internships**

*1.   **Project summary:** Provide a clear and concise statement summarizing the work your institution(s) completed during the duration of the grant period.*

The MIT PKG Public Service Center's Social Impact Internship program pairs highly-skilled MIT undergraduates with nonprofit and government agencies to build capacity and bolster the technical capabilities of these agencies while engaging students in challenging social impact issues in real-world settings. Thanks to a $90,000 grant from PIT-UN, we were able to strengthen the program's focus on public interest technology by building partnerships with new social impact organizations and directly funding stipends for 16 undergraduate students to collaborate with those agencies on tech-centered projects. The funding also helped us to institutionalize the program at MIT and make the case for student demand for career development in social interest technology.

2.   ***Progress towards objectives:*** *Describe the specific objectives of the project supported by the Challenge, the activities you engaged in during the grant period to accomplish these objectives, and any progress towards the outcomes or impact that you were hoping to achieve. Where you were able to accomplish your objectives, please describe what you saw as the key drivers or enabling conditions of that success. If applicable, please share a specific instance or event that illustrates the impact of your project.*

We were successful in meeting our key objectives for the grant:
  A. <u>Provide student experiences combining public interest work and professional development</u>

      During the summer of 2021, we sourced undergraduate internships with approximately 50 organizations doing public interest work, 14 of those

organizations were new partners for the Social Impact Internships program. Connections with new agencies were driven largely by referrals from agencies that were well-satisfied existing partners in the program.

We provided funding for 86 students to intern with these organizations, 16 of which were funded through the PIT-UN grant. We also collaborated with MIT's primary international experiential education program, MISTI, to co-support 4 public interest technology internships overseas (albeit in a remote capacity due to COVID).

Demand was high from both students and host organizations. We were only able to fund 1 in 5 student applications, and we were unable to partner with all interested host organizations primarily due to limited funding.

The experience was very positive for both MIT students and host agencies.
- 93% of interns rated their internship as "excellent" or "good", and 99% of interns indicated that they gained professional knowledge and skills that will be beneficial in their future careers.

- Agency partner satisfaction with the program has been high since its inception in Summer 2020, with 99% of hosts indicating an interest in hosting another student. 100% of summer 2021 hosts indicated a desire to participate in future internship cohorts.

Cross-campus collaborations, including with MIT's new Schwarzman College of Computing, were boosted by MIT's growing commitment to incorporating social and environmental responsibility in classroom-based courses and experiential education opportunities across the Institute's disciplines.

B. <u>Build capacity for agencies with limited tech and financial resources, particularly those serving marginalized populations</u>

Students worked on an array of capacity-building social interest technology projects with their agency partners, with the majority of projects including a strong focus on serving marginalized populations. Examples:

Bronx Cooperative Development Initiative: BronXchange Data Engineering + Analytics Intern
BCDI is a community-led planning and economic development organization that creates shared wealth and ownership for low-income people of color in the

Bronx. BronXchange is launching a digital platform to scale support for Bronx businesses, providing a digital portal for all stakeholders in the Bronx ecosystem that ensures equitable economic growth. The data management and analytics intern worked to identify, organize, and analyze a variety of datasets and built interactive data tools for utilization by platform users.

Massachusetts Taxpayers Foundation: Post-COVID Healthcare Policy Intern
The intern examined the impact of state policies on the adoption of telehealth services following Covid-19 in order to offer potential policy recommendations to encourage appropriate, equitable, and effective use of telehealth throughout Massachusetts.

Lovin' Spoonfuls: Data Analytics + Systems Project Intern
Lovin' Spoonfuls works to recover and distribute healthy, perishable food (that would otherwise be discarded) to community organizations using technology. The intern utilized data and technical skills to develop and implement sustainable and repeatable data reporting solutions for their operations team.

Partner Feedback:
"We are a small organization, so having a student intern with strong research and technical abilities makes it possible to perform research that wouldn't otherwise be possible. This research helps us inform policymakers and ultimately shape the direction of public policy."

"[The intern]'s web design expertise truly helped us transform [our platform] into a more comprehensive, user-friendly, and accessible resource platform for all of our users."

"In the short term, they were able to increase our project research and tool development capacity. In the long term, they were able to develop [technological] infrastructural tools that will improve the project cycle time overall."

Success in meeting this objective was driven by the shared enthusiasm for these collaborations among the agency, student, and MIT stakeholders. Agencies valued the technical expertise and creative thinking that the students brought to the work, and students were excited to apply their practical skills in context where they could have a tangible and meaningful impact while exploring alternatives to "classic" tech careers.

C. <u>Deepen students' understanding of social change in action to inform their future careers</u>

In addition to working with their community partners, students participated in reflection activities with PKG Center staff and in peer-learning groups with other interns in the program.

Interns were grouped into small "reflection communities," and met twice over the summer to share their experiences with each other, and reflect on their work. The groups each had a common theme, such as climate change, data visualization, and health equity. Each student then produced their own blog reflecting on their work and the social and/or environmental issues they were tackling through technology.

Some examples of student reflection blogs:
[Jason Lin ('23): Almost Fun](#)
[Tammy Chen ('23): Asian Americans/Pacific Islanders in Philanthropy](#)
[Tamea Cobb ('24): Msaada Partners](#)

The PKG Center collaborated with the MIT Department of Philosophy and Office of Experiential Learning to incorporate Social Impact Interns into an innovative summer class, Experiential Ethics. Participating interns received academic credit, networked with peers interested in ethical tech, and were mentored by trained MIT graduate students.

Additionally, we ran a summer speaker series, *Stretch Your Impact*, that highlighted the work of MIT students, MIT faculty, and community agencies who are doing exciting work in public interest tech. Speakers included:

● Sebastian Sandoval Olascoaga, PhD candidate in MIT's Dept of Urban Studies and Planning, who is using data science to answer community-generated research questions about connections between systemic racism and the housing crisis in Boston

● Juan Martinez, Chief Communications Officer at the NAACP-Legal Defense and Education Fund, who discussed opportunities for undergraduates with tech skills to contribute to anti-racism work

D. <u>Present a viable alternative to for-profit internships that draw MIT students with high-salaries and perceived prestige</u>
As outlined in our proposal, MIT surveys show that undergraduates arrive aspiring to build a better world but, when surveyed again as seniors, they show a decreased interest in working for social and political change. A "public interest gap" at MIT contributes to this shift in attitude. Relative to for-profit industry or research, public interest opportunities at MIT are few, less visible, pay less, and viewed as lacking prestige.

Computer Science is by far the largest major at MIT, and very few students graduate without having taken some computer science courses. In filling the "public interest gap," it is critical to develop opportunities that enable computer and data scientists to apply their skills with social impact organizations. Approximately 50% of the Social Impact Interns hailed from tech majors (i.e., Computer Science, Math, Engineering disciplines)--majors that to date have been under-represented in campus social impact programs. The majority worked in public interest tech positions.

The PIT-UN grant helped us to build new connections with organizations and provide stipends to enable students to forgo corporate tech internships in favor of social impact work. As the Social Impact Internships program becomes more established at MIT, we aim to increase the stipends and partner with additional faculty to boost the prestige of public interest work.

3.   **Challenges or lessons learned:** Highlight any challenges, expected or otherwise, or lessons learned throughout the grant period. Describe any adjustments or changes you made to your activities to address challenges as they arose.

One key challenge was that the continued prevalence of COVID-19 meant that the internships had to be undertaken remotely. While this reduced the students' direct exposure to the communities and issues central to their internships, we were delighted by how well the remote collaborations worked and by the productive relationships the students and agencies were able to build. Given the success of these remote collaborations, we will be offering both in-person and remote social impact internships in the future and continue to provide resources and best practices for remote supervision.
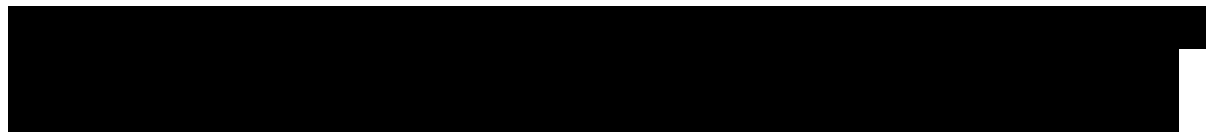
4.   **Equity, diversity, and inclusion:** Describe how your project meaningfully addressed the barriers to equity and access related to Public Interest Technology that you identified in your original grant proposal. If your project was not able to address said barriers as meaningfully as intended, please describe what challenges you experienced or lessons you learned.

The program addresses equity, diversity, and inclusion issues of student participants and of collaborating agencies:
  ● Students with tech skills can earn a significant amount during a summer internship with a for-profit tech company: some MIT students earn $25,000 in summer internships. Consequently, students who are interested in socially-focused internships nonetheless often take less meaningful but well-paying positions.
  ● Many agencies that support marginalized communities operate on lean budgets and do not have the staff capacity or funds to seek out MIT student interns.

By paying all the Social Impact Interns a liveable stipend, the program aims to make social impact tech work affordable and attractive to all MIT undergraduates. Our program data show that 80% of Social Impact Interns are individuals of color, first-generation, and/or low income.

Similarly, because the PKG Center funds the student stipend on behalf of most participating agencies and facilitates intern recruiting and management, organizations can afford to host talented students without diverting much-needed funding and staff time from their community work.

When partnering with agencies, we focus on those that have equity as a core tenet of their work and prioritize positions that relate to equity and access. New agency partnerships for summer '21 that particularly illustrate this focus included: Maine Department of Health and Human Services, Community Voices Heard, Massachusetts Health Quality Partners.

5.   **Network impact:** Describe how your project created shared resources or otherwise strengthened the community of educational institutions committed to Public Interest Technology.

As described above, the summer program included a speaker series, *Stretch Your Impact*, that highlighted public interest technology work and the folx engaged in this field. We offered a mixture of panel discussions and workshops with students, faculty, and community partners to encourage students to stretch the impact of their technological skills by using them in public good spaces. These sessions were open to MIT students and the wider community, and we particularly welcomed participation by other schools in the PIT-UN network. PIT-UN staff kindly helped to spread the word about the events within the network.

We encouraged students to submit their work to the PIT UNiverse September Issue that is produced by and for PIT students. We were delighted to see MIT sophomore Mercy Oladipo's article published there as well as reflections from MIT undergraduates Mallika Pajjuri, Shaida Nishat, Andrea Arias, and Julian Zulueta that were highlighted in the Grantee Spotlight on the PKG Social Impact Internship Program.

The New America Blog also featured our Social Impact Internship Program. See last section for links.

6. **Institutionalization of Public Interest Technology:** Describe how, if at all, your project will contribute to Public Interest Technology becoming institutionalized within your university (i.e., through committed university funds, support from leadership, or collaboration between departments, faculty, or other groups). If you do not anticipate Public Interest Technology will become institutionalized in the short- or long-term, please explain why.

"Building a better world" is at the core of MIT's mission and we believe the Social Impact Internship program represents the best of what MIT has to offer. Though COVID-19 was a major disruption for students and our community partners, the program supported both groups by providing agencies with tech-savvy student workers while keeping students connected to meaningful, purpose-driven work. Additionally, the program aligns with the new MIT Schwarzman College of Computing's priority to create "cross-cutting platforms for the study and practice of social and ethical responsibilities of computing for multi-departmental computing education." The program is an experiential pathway for College of Computing students to apply their studies with communities around the country. PIT-UN funding accelerated our collaboration.

The PKG Center has grown its network of partners thanks to MIT's extensive alumni community and strategic outreach. We sourced summer '21 internship opportunities

with these partners and organizations connected to the Schwarzman College of Computing's Social and Ethical Responsibilities of Computing program.

During the 2020-2021 academic year, the following MIT entities provided significant funding for Social Impact Internships:
- Office of the President
- Office of Experiential Learning
- MIT's Community Service Fund

The PKG Center developed a strategic plan for the Social Impact Internship program which includes increased collaboration with other MIT departments and centers. We are systematically forging connections that will expand the program, such as with MIT's new Climate and Sustainability Consortium.

During fall 2021, MIT released a set of recommendations from its Task Force 2021 and Beyond. In its report, Task Force 2021 directly references and supports expansion of PKG's Social Impact Internships and associated funding. Specifically, the Social Equity & Civic Responsibility Refinement Implementation Committee recommended that MIT **"alleviate the under-supply of experiential equity and civic responsibility internships."** MIT leadership is now working with the Institute's Resource Development office to fundraise for additional social impact experiential learning opportunities. The PKG Center for Public Service already is doing this vital work and is primed to reach many more MIT students and communities through an strategic expansion of our undergraduate Social Impact Internships resulting from additional funds.

Our PIT-UN grant helped us demonstrate the success of our program. We are grateful for PIT UN's support.

7.   **Attachments:** In addition to the report narrative, please submit the following attachments:

    a.   **OPTIONAL:** Demographic data about your project, using the Challenge demographic data form.

    b.   Financial report detailing final accounting of budgeted vs. actual expenditures of all grant funding, including the entire project budget and all sources of revenue and expenditures (including grassroots and direct lobbying expenditures, if applicable), in addition to this Grant.

c.   A list of all intellectual property and assets purchased or created with the Grant.

N/A

d.   Any publications or media generated as a result of your project.
Some Additional Student Blog Posts
- Diego Colín ('22): Massachusetts Taxpayers Foundation
- James Nguyen ('23): Naval War College
- David Ulloa ('23): Cognitive Toybox
- Tory Lentine ('23): Maine Department of Health and Human Services
- Haylee Niemann ('21): World Education, Inc.

New America Blog Post
- Connecting Students to Experiences in Public Service: PKG Social Impact Internships at MIT

PIT Cases
- Student Reflections on the Social Impact Internship Program
- How My Interests Have Driven My PIT Work Time and Time Again