build4good

Building the Next Generation of Public Tech Professionals

PRESENTED BY

Siegel Family Endowment

We are a foundation focused on understanding and shaping the impact of technology on society.

ABOUT SIEGEL

Siegel Family Endowment employs an inquiry-driven approach to grant making that is informed by the scientific method and predicated on the belief that philanthropy is uniquely positioned to address some of the most pressing and complex issues facing society today. Our grant making strategy positions us to be society's risk capital. We support high quality work that will help us derive insights to timely questions and has high potential for future scale. Our focus is on organizations doing work at the intersection of learning, workforce, and infrastructure. We aim to help build a world in which all people have the tools, skills, and context necessary to engage meaningfully in a rapidly changing society. Siegel Family Endowment was founded in 2011 by David M. Siegel, co-founder and co-chairman of financial sciences company Two Sigma.

OUR FOCUS ON INFRASTRUCTURE

We believe that strong social, physical, and digital infrastructure is a prerequisite for cultivating an equitable society. Our work aims to make the infrastructure of today and tomorrow work for all people. We do this by supporting organizations that foster the growth of resilient social networks and communities, strengthen public spaces and buildings, and expand access to digital life.

PUBLIC INTEREST TECHNOLOGY

As technology's role in all parts of society continues to expand, it's our goal to ensure that everyone is conversant with technology as it affects all areas of our lives. We work with policymakers, technologists, researchers, and educators to ensure that the design, deployment, and use of technologies are leveraged in a way that advances the public interest. Our grantees use technology to enhance public institutions, imagine solutions that will fulfill unmet needs, and to critically examine technology's impact on civic life.



About Grantee



build4good, an initiative of New America, matches promising college students in technology-related majors with nonprofit organizations that have technology-specific project needs. The program sets students up to participate in paid summer internships, receive mentorship from field leaders, and engage in professional development opportunities, seminars, and social experiences with a cohort of their peers. Participating nonprofit organizations also benefit from the partnership; build4good interns bring expertise, energy, perspective, and capacity to their work, expand employer access to tech talent, and advance the goal of effectively harnessing the power of technology for social good.

Executive Summary

IN THE SPRING OF 2020, technology and learning expert An-Me Chung began to hear reports that college students' summer internship offers were being revoked amid the COVID-19 pandemic crisis. At the same time, Chung began to hear from colleagues in the nonprofit sector who were in desperate need of technical expertise, especially as many services switched to online formats.

In response, Chung partnered with Shivam Jindal and Andy Ju — both university students studying computing — to develop a program to address both challenges simultaneously. Chung remembers that the group said, "Let's find ways to match these computer science majors and tech savvy college students with nonprofits."

That early grassroots effort became build4good, an initiative of New America that places students studying computer science, integrated digital media, UI/UX design, and other technology-related fields in paid summer internships with mission-driven, nonprofit organizations. Throughout the summer, build4good coordinates mentorship, professional learning opportunities, social events, and other activities that support interns. It offers resources and advice to host organizations, including help in defining a manageable project for interns to complete; offering mentorship when many staff don't work in technical fields; and in building human-centered design concepts into workflows. build4good actively recruits diverse participants and makes its programs accessible and approachable for a wide range of students studying computing-related subjects.

The program aims to not only fill a critical need for nonprofits, but to also showcase diverse career pathways for students in technical fields. "This was a way to help students explore different career opportunities," says Chung. At the same time, the program exposes both students and nonprofit organizations to new ways of thinking about the power of technology, and the potential to harness the power of technology for the public good. That mindset is a useful outcome no matter the career that students ultimately pursue, says Chung. "We have a better chance of having students graduate understanding the bigger world that's possible to them that is directly linked to social change."



Students pursuing technology-related college degrees are often unaware of opportunities to apply their skills in the nonprofit sector. Public interest technology summer internships can illuminate this work for students, and pave the way for an expanded talent pipeline of technologists working to advance the public good.

Host organizations can benefit enormously from hosting a summer intern working on a technologyrelated project. However, the value of the experience increases when the internship is thoughtfully designed and when the matchmaking organization actively supports both the host organization and the intern. That support can take many forms-from checklists for prospective managers, to guidance for mentors, to events and engagement opportunities for both interns and employers.

Summer internship programs can implement specific policies to encourage racial, socioeconomic, and gender diversity. These policies include ensuring that interns are paid fair wages, casting a wide net to identify potential interns, activating a network of alumni ambassadors in recruiting, working with organizations to create meaningful projects, and developing mentorship and support systems that are responsive to interns' needs.

Core Elements: What Makes the Program Work?

BUILD4GOOD OFFERS a targeted solution to a specific challenge by providing technical expertise to mission-driven nonprofit organizations. Despite this tight focus, the program produces impacts that extend far beyond students' summer internships. build4good also offers a vision for, and pathway toward, tech careers in the public interest for students while communicating the value of humancentered design principles and thoughtful use of technology in the nonprofit sector.

SPOTLIGHTING PUBLIC INTEREST **TECHNOLOGY CAREERSS**

FOR MOST OF THEIR COLLEGE CAREER, Milo Soriano, an undergraduate student at New York University pursuing a degree in integrated design and media, was pretty sure that they'd pursue a career in the tech sector. That all changed with Soriano's experience at build4good. "Before build4good, I didn't even know there was a career option for me outside of tech," Soriano says. "I didn't know that I could be [applying those same skills] to nonprofits."

build4good was founded to encourage this type of realization for students in computing-related fields. Chung says, "You have all these really thoughtful, smart students, at colleges and universities, and



A collage of build4good intern projects (Credit: Cameron Benham)

EMPLOYER PARTNER

Dr. HaeSung Han CO-FOUNDER AND CEO AT POETIC



HaeSung Han co-founded POETIC in 2017 to break the cycle of youth exploitation in North Texas using evidence-based therapy and best practice programming for youth. Han says, "The answer is to address mental health and under-education while supporting the family. That breaks the 9-5 PM mold of services."

That vision still drives POETIC in its work to support and empower girls in North Texas who have experienced child mistreatment, commercial sexual exploitation, and sex trafficking. POETIC offers dialectical behavioral and trauma therapy alongside a creative arts studio, entrepreneurial education with paid internships, and education support and advocacy, all at no cost to the youth, with no age-out restrictions.

POETIC's original website didn't reflect the full-range of services offered. "Our initial website reflected where we were six years ago," Han says. In 2021, POETIC

hired a build4good intern to redesign the website to appeal to and reflect its core audience: young people in North Texas.

Han says that the experience of hosting a build4good intern was incredibly positive. As a young woman of color, the intern brought a unique perspective to the work, and Han was impressed by the intern's "creativity and follow-through." Han continues, "I really appreciated her thinking outside of the box" in imagining what the website could be. "She created a website that was very, very fresh, and that was in-line with what a youth might be intrigued by."

Just as important, Han highlights the critical role that build4good played in managing the recruitment process and supporting POETIC's intern. "Typically, there's a lot of support needed to really help the intern bring about the deliverable. But with build4good, that support was already embedded in the program."

EMPLOYER PARTNER

Brian O'Donnell

CO-FOUNDER AND DIRECTOR AT CAMPAIGN FOR NATURE



Every other year, <u>Campaign for Nature</u> hosts a large event at the United Nations in New York. The event brings together heads of state, environmental ministers in government, leaders of large philanthropic foundations, and others to make commitments and pledges to address environmental challenges. It's a big undertaking under ordinary circumstances, but the 2021 event was particularly complex, said Brian O'Donnell, Campaign for Nature's co-founder and director. "We had a new coalition of foundations attending who had made the largest ever financial commitment to Campaign for Nature." Plus, the COVID-19 pandemic made organizing a dual in-person and remote event especially challenging. "While you're still in the midst of a pandemic and [dealing] with governments, there are a lot of moving parts, a lot of languages and translation," O'Donnell says.

The event went smoothly, in no small part because of the build4good intern involved in the planning and production. O'Donnell describes the intern as "a really quick learner, who showed immense curiosity and interest in the topic."



He says that the experience was a win-win. "It was a good experience for all of us. [The intern] had an opportunity to suddenly be right there, with governments, and see how these issues make real-world impact. And we had someone who could be a key part of our team in coordinating that event."



Interns Carlos Penzini (left) and Riley Griem (right) sharing project updates at a cohort gathering

you lose them because they don't know about these public interest tech opportunities." The build4good internship is designed to show students the possibilities for creative and technically challenging work within nonprofit organizations—and ultimately, to expand the talent pool for technologists working for the public good.

Students typically don't view nonprofit organizations as "technology organizations" per se, but interns say that build4good's host organizations are fruitful spaces to explore tech careers for the public good. When asked about key learnings from the summer, one intern reflected in a survey, "There are pathways other than big tech that lead to fulfilling careers."

Many also noted that the program's guest speakers and mentors offered important perspectives about opportunities post-graduation. "I really enjoyed learning about the journey that it took for the speakers to get to where they are now," wrote one surveyed intern. Interns said that it was often reassuring to hear from people who had worked in both the tech industry and in public interest tech careers, or who applied public interest technology principles to a diverse set of issues. In the follow-up survey, interns said that they appreciated hearing about "non-linear" paths, and that such talks provided a sense of "validation" as they considered their own long-term plans.

► THE IMPORTANCE OF SUPPORTING HOST ORGANIZATIONS

THE FIRST BUILD4GOOD COHORT of organizations and interns was assembled on-the-fly as the emerging COVID-19 pandemic shut down in-person operations, and economic uncertainty led many companies to revoke summer internship offers. The initial group of students and host organizations came primarily from the personal and professional networks of build4good's founders. build4good staff vetted internship candidates and matched them with organizations, and checked-in regularly with participating nonprofits to provide guidance on how to structure projects.

Over time, build4good developed more robust and systematized support mechanisms for host organizations that helped make the internship experience a more seamless one for both student and host organization. Based on feedback from nonprofits that had previously hosted interns, build4good developed a <u>manual</u> for interns and host organizations.

Chung reflects, "We share this information verbally, but we had not written them down before. We want organizations to realize that we're here to support them." build4good's new resources for interns and host organizations address everything from expectations and responsibilities to how to manage an intern remotely, to how to create a contract directly with interns, to how to identify and design discrete public interest tech projects that interns can tackle and complete. Leaders at build4good hope that these materials and opportunities to engage with them will help nonprofits recognize that they can successfully host a build4good intern and set them up for success.

The new resources for host organizations also highlight the ways in which build4good takes care of many aspects of internship programs that are typically an employer's responsibility. In many cases, build4good will both identify an intern candidate, and match them directly with a host organization. That aspect of the program was particularly attractive to Brian O'Donnell, founder and executive director of <u>Campaign for Nature</u>, a nonprofit dedicated to pursuing policies that support biodiversity. "It becomes a real burden for smaller organizations to put a note up saying, 'We'd like interns this summer,' and then go through resumes," O'Donnell says. "It's a real service that build4good does the vetting."

BENEFITS OF ADOPTING STRATEGIES TO ENCOURAGE DIVERSITY

WHEN ASKED WHY STUDENTS should consider a build4good internship, Soriano is direct. "A big reason is that it's paid." Soriano recounts examples of classmates who've been taken advantage of, putting in many hours with startups without compensation. "Having a paid position where you can get career development and get work in your portfolio is one of the best things you can really provide for somebody," says Soriano.

In addition to allowing interns to pursue their work deeply, fair compensation has important implications for the diversity of the field. It allows students from socioeconomically disadvantaged backgrounds to participate in the internship, and to consider careers that they may not have previously seen as possible. build4good has worked to ensure other types of intern diversity as well. The program casts a wide net when reaching out to organizations and institutions that serve students of diverse racial and gender identities.

STUDENT PROFILE





Sarah Suchmann remembers the chaos and anxiety of the early days of the COVID-19 pandemic shaping her experience as a student at New York University. "I'm freaking out, because I don't think I'm going to get an internship, and it's junior year, and a lot of people say it's important to have an internship by your junior year."

It was in that moment of panic that Suchmann saw an email blast to students in her program, urging them to apply for a build4good internship. Suchmann quickly applied, and landed a remote internship with the <u>Oregon Afterschool and Summer</u> for Kids Network (OregonASK), a nonprofit organization that builds support for quality afterschool programs through policy, program, and advocacy work.

Suchmann had developed expertise using geographic information system (GIS) technology and techniques as a sustainable urban environments major within NYU's engineering school. That knowledge was critical to OregonASK's story mapping needs, as well as other statewide afterschool networks that followed.

"Essentially, I was telling a story about the need for quality afterschool programs through maps," Suchmann recalls. "It was a chance to apply what I was learning in the real world, with real data."

Suchmann graduated from college and embarked on a career at a renewable energy firm. She credits her build4good internship with easing the transition into the work world.

"So much of school is learning and figuring out what gets you excited. But you don't learn about what actual company roles look like," Suchmann says. "Having that internship opportunity put me ahead of some other people in that regard. I understood how organizations work. It was a significant foot in the door."

As a build4good alumna, Suchmann is sharing her expertise to help open the door for new build4good interns. Suchmann has helped new interns learn how to use a web-based mapping software. Suchmann also helped to facilitate conversations among interns at last summer's in-person meeting. When Suchmann's firm was hiring for a new role, she spread the word through the build4good network. Suchmann says that the exchange of information, ideas, and skills has gone both ways; she has learned as much from build4good interns as they have from her.



Sarah Suchmann's project maps school-age youth and afterschool program sites within each of Oregon's 197 public school districts.

STUDENT PROFILE

Paolo Esguerra





Paolo Esguerra describes his educational journey as "nonlinear." After studying electrical engineering at a private university for a year before deciding that it was not a good fit, Esguerra worked alongside his father as a car mechanic and helped his mother build a food services business, serving Filipino food at a local night market.

Esguerra decided to return to school a few years ago. He always liked his computer science courses, and enjoyed serving as an instructor at a summer camp focused on technology. Those experiences prompted Esguerra to pursue a computer science major at Queens College, part of the City University of New York (CUNY), where he's now a senior.

Esguerra learned about build4good through CUNY's career center. He was intrigued by the possibility of coupling his technical skills with his interest in education. Esguerra applied and was placed at <u>Digital Promise</u>, a nonprofit organization that works toward equitable education systems with a focus on technology. The experience has been mutually beneficial; in fact, Esguerra continues to work at Digital Promise as he completes his college degree.

Working at Digital Promise has been eye-opening for Esguerra. "It really changed my perspective," he says. "I'm working with all these people who are especially passionate about the mission — education — as well as technology." Esguerra hadn't conceived of a role for himself in the nonprofit sector, but his experience at Digital Promise has shown him otherwise. "I got to experience the software development life cycle that I'm learning in class right now — but in a nonprofit [setting]," Esguerra says.

Esguerra credits the internship with expanding his career horizons and teaching him important interpersonal skills. He also values the diversity of speakers' backgrounds and skillsets, from policymakers to AI experts. "You wouldn't get that from a standard internship,"

Welcome Log in to Digital Promise - Dev to continue to All Applications.	
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Paolo Esguerra's build4good project involved migrating the identity managers of Digital Promise's platforms to Auth0.

Esguerra says.

He describes the program as "life-changing" because it revealed career options that weren't otherwise obvious to him. "I always thought, 'I'll be a developer,' and I didn't care where. My experience with build4good opened up my mind to the fact that there are these [public interest technology] roles out there."

An example is the group's work with the <u>Public Interest Technology</u> <u>University Network (PIT-UN)</u>, a New America program committed to using a social justice lens in fostering collaboration between colleges and universities to build the field of public interest technology. With the support of build4good, Carlos Penzini, a computer science student at Duke University attended the <u>PIT-UN annual convening</u> in 2023. He came away with a better sense of how his work as a build4good intern fits into the larger movement of public interest technology. "The conference showed me the amount of variance in public interest technology," Penzini reports. "It felt like the work I had been doing with build4good was put into perspective, but also opened my mind to the vast application of public interest technology in the modern world." Coming out of this experience, Penzini plans to develop a public interest technology club at his university.

build4good's summer programming also includes efforts to make sure that mentoring and support systems are responsive to interns' unique needs. Further, build4good plans to reserve at least one internship slot each year for a student with a disability, another lens through which to help ensure that oft-neglected perspectives can help shape the public interest technology landscape. This internship spot will be dedicated to Eryk D'Meza, a build4good intern and biomedical engineering student at New York University who sadly passed away in 2022. His goal was to help others with disabilities like himself.

The gender, racial, and socioeconomic diversity of the build4good intern cohort also has major implications for public interest technology more generally. When the field reflects diverse backgrounds, products are also better and more responsive, says HaeSung Han, the co-founder and CEO of <u>POETIC</u>, an organization dedicated to ending the cycle of vulnerability and victimization of youth. Han hosted a build4good intern who was a woman of color and who was close to the same age as many of the young people that POETIC serves. That correspondence helped the intern make website redesign recommendations that helped POETIC better serve their target audience.

Impact

AT THE END OF THEIR SUMMER internships, build4good participants complete a survey about their experiences, and the feedback from the most recent round is impressive. The current cohort members were overwhelmingly satisfied with their overall build4good experience, as well as specific features of that experience, including weekly check-in calls, their host organizations, cohort check-ins, and weekly cohort guest speakers.

Students commented on the community they built and the hands-on learning they gained as particularly valuable. One intern wrote, "The cohort [connections] made the experience very different from other positions I've held in the past. We could easily bounce questions off each other, and we were able to build great relationships." Another commented, "I liked that I was able to get some hands-on experience working with something that I haven't done before." Reflecting a common theme across survey responses, the intern continued, "I also liked that I had support from both the company I worked with and the build4good mentors."

For their part, host organizations have been pleased with interns' contributions. "I appreciated the level of professionalism and technical capability of our intern...Her problem-solving skills, attention to detail and applied knowledge of computer science was impressive," said one. Many said that they would not have been able to pursue build4good-designated projects without the program, as they lacked the capacity to commit to these projects otherwise.

Many managers reflect that build4good's impact on their organizations has extended beyond work output. One manager said, "As a technologist, I firmly believe that it's not only our responsibility but also a wonderful opportunity to guide the next generation in understanding what truly matters in technology, what potential pitfalls to watch out for, and how technology can be harnessed for

STUDENT PROFILE **Milo Soriano**





As an aspiring multimedia designer and UX/UI researcher, Milo Soriano faced a Catch-22. Soriano had developed the technical skills needed to succeed in these roles, but they lacked a comprehensive portfolio that could

help them land a job. Without work experience, they couldn't get work experience. "My goal was really to build my portfolio," Soriano says.

Soriano has achieved that goal - and much more — through two consecutive summers as a build4good intern. Most recently, Soriano drew on human-centered design principles to create a digital accessibility handbook as an intern at New America. Soriano's first day on

the job at New America was spent at an in-person convening co-sponsored with the U.S. Department of Education about accessibility and educational technology. Soriano drew on the initial contacts they made at that event for interviews with experts and reading recommendations. Soriano also interviewed stakeholders throughout New America to understand organizational needs.

Based on this research, Soriano created a handbook and checklist for accessible content and communication. The handbook will be used across the entire New America organization and shared with other like-minded



A digital accessibility checklist from Milo Soriano's build4good project at New America

> organizations — and is an important artifact in Soriano's work portfolio.

Soriano found the build4good experience valuable in other ways. "I wanted to be in an environment where I could meet my peers in a noncompetitive way and really focus on professional development," Soriano says.

Speakers, team-building calls, and an in-person gathering all helped Soriano meet this goal. "The program really allows you to see the power and the options you have as an individual working in STEM," Soriano says. "You see that your path doesn't have to be so straightforward."



build4good interns, alumni, and staff meet at an in-person convening during summer 2023.

the greater good. When we provide these opportunities to interns, we not only influence their perspective on technology, but they, in turn, have a profound influence on us."

Survey data suggests that the program is succeeding in its goal of encouraging students in technical fields to consider nonprofit and public sector careers. Participants said that the experience had changed their perceptions of nonprofits; many had previously believed that mission-driven organizations were staffed primarily by volunteers, or didn't offer viable career opportunities for people with technical skills. What they found in their build4good internships often surprised them — and made them more likely to pursue work opportunities there. As one intern put it, "Now that I have gotten a taste of working in the nonprofit sphere I am more open to opportunities there."

build4good is still in its infancy, and its long-term effects on individual interns, specific host organizations, and the public interest tech field more generally may not be known for some time; diversifying the field will be a long-term process with many different moving parts. build4good leaders recognize this challenge, and are actively working to build capacity in order to create transformative sectorwide impact in the long-term. For example, the program is creating an alumni network to aid with intern recruitment and to share news about public interest tech careers. build4good is also looking for opportunities to share interns' projects with others in the field who can benefit from their work. Such activities are designed to extend the small program's impact.

– Next Steps

BUILD4GOOD INVITES a range of stakeholders to get involved in its work:

- Nonprofit organizations interested in hosting a build4good intern can fill out a <u>brief interest form</u> and the build4good team will reach out to schedule a call for a meet-and-greet, and to brainstorm potential projects. In addition, those interested may also consult <u>build4good's manual</u> for interns and hosting organizations.
- University students majoring in computing-related fields including computer science, integrated digital media, or UI/UX design — can join build4good's mailing list to be alerted when applications for the next cohort of build4good interns opens.
- University departments and student groups can reach out to build4good at <u>build4good@newamerica.org</u> to find out how they can help recruit diverse candidates on campus.

To learn more and contact Siegel Family Endowment, visit www.siegelendowment.org