# **PIT-UN Challenge Grant Final Report**

# Supporting and Showcasing PIT: Building Community through Signature Projects

Laureen Elgert and Yunus Doğan Telliel
Worcester Polytechnic Institute

# 1) Project Summary

Using technology for the public good is a fundamental part of WPI's project based learning curriculum. It is particularly relevant to our flagship Interactive Qualifying Project (IQP) program where students are asked to investigate problems relating to technology and society. 'Public Interest Technology' (PIT) as an area of study, however, is not known by name, not fully recognized as a field in its own right. Nor is it widely considered as a robust career path. Our PIT-UN project started the process of raising awareness around the concept/framework on WPI's campus, and bringing interdisciplinary scholars, students, and practitioners together to understand the diverse ways of understanding, studying, and practicing public interest technology.

We advanced the creation of a 'culture' of public interest technology and promoted the visibility and legitimacy of research, pedagogy, and PIT-related careers for WPI faculty, staff, and students in three ways. First, we created a concentrated PIT community by supporting 7 'signature projects' (9 faculty and staff in total). These projects were intentionally interdisciplinary and diverse to showcase the range of themes that could be considered 'PIT', and to help spark the imaginations of our community. The signature projects helped us respond to the question we were often asked by our students and colleagues, 'what is PIT?', with concrete examples from our own backyard.

Secondly, we built a solid WPI-based network of PIT-engaged scholars through coordinating and leading a series of 'cohort meetings' where the leads, co-leads, and participants of the signature projects came together monthly to discuss the projects and further develop a shared understanding of what PIT means at WPI, as well as some of the pertinent issues involved in conceptualizing PIT.

Thirdly, we designed, coordinated, and undertook a series of events that engaged the broader campus community, and began coalition building with partners at Quinsigamond Community College in thinking about and deploying PIT. These more 'public-facing' events were designed to bring excitement, engagement, and collaboration around PIT, and included 'PIT-Fest' in April, and 'Social Justice Week' in November.

# 2) Progress Towards Objectives

# 2.a) Signature projects:

The idea of the signature projects was to create deep involvement and commitment to public interest technology by supporting 7 faculty to develop PIT projects in their own areas of interest, but that could generate thoughtful, critical, and interdisciplinary discussion, and begin to forge an institutional understanding of PIT. To kick off the signature projects, and introduce the concept, we hosted a panel, titled 'Social Justice at WPI: Technology in the Public Interest', as a part of WPI's 'Critical Conversations'. With over 100 participants, the panel centered social justice in the way PIT is understood at WPI.

The following signature projects were initiated and, in most cases, are ongoing:

- <u>Gillian Smith</u> (Computer Science) investigated ways to make computing meaningful for the broader public by working with African American quilters on a project on computational craft.
- <u>Berk Calli</u> (**Robotics Engineering**) developed a public interest robotics perspective on sustainability.
- Angela Rodriguez (Psychology) and Ben Nephew (Biology & Biotechnology) used digital storytelling to promote an understanding of the biophysical impacts of discrimination.
- Aaron Sakulich (Civil and Environmental Engineering) developed accessible technologies for citizen scientists who monitor and document water quality.
- **Gbeton Somassee (Economics)** created tools and course modules for technical experts to become more engaged with the public policy process.
- Farley Chery (Interactive Media and Game Development) will work on a project aiming to diversify racial representation of animation characters in virtual environments.
- Lisa Stoddard (Environmental Studies) and Kathy Chen (STEM Education Center) promoted social justice in STEM education and assessment techniques for PIT learning outcomes.

# 2.b) Cohort Building:

To build the initial cohort among the 7 signature project leads (and others who were involved in these projects), we held monthly workshops where we alternated between presentations of the signature projects with discussions and feedback, networking, and discussions of PIT related articles, podcasts, and other media. We were also able to engage WPI community outside of the 7 signature projects, by personally inviting individual faculty members, staff, and students to monthly join workshops in issues related to their areas of interest.

With the participation of 4 of the signature project leads and 3 associates (one undergraduate student, one doctoral student, and a staff member from the STEM EducationCenter), we sponsored a storytelling workshop, <u>led by TMI Project</u>, under the rubric of 'PIT Stories/Stories are Data'. The idea here was that storytelling is an integral part of understanding how technology impacts the personal lives of people, and that stories can be considered data that can be analyzed in service to illuminating the technology/social justice nexus. During the summer of 2021, this group of 'PIT

storytellers' met weekly for 2 hours over 10 weeks to develop together stories of how technology, identity, racism and sexism, have intersected in shaping personal experiences. The PIT storytellers told their stories to the WPI public at a live event during WPI's Social Justice Summit, November 14-16, 2021. Because of the intimate nature of storytelling at this event, we were asked not to record the event.

# 2.c) Community outreach event series, punctuated by 2 PIT Events: Social Justice Summit (November 14-16, 2021) and 'PIT-Fest' (March 30 & 31, 2022):

### Community events

- Oct 20, 2020: Critical Conversations: 'Social Justice at WPI: Technology in the Public Interest, featuring Laureen Elgert, Ben Nephew, Angela Rodriguez, Gillian Smith, Farley Chery, and Gbeton Somassee.
- May 21, 2021: Coded Bias: Film Screening and panel Discussion with Shalini Kantaaya, with Drs. Gillian Smith (Media and Game Development) and Crystal Brown (Political Science)
- Oct 21, 2021: Being Black and Male in Engineering, a talk by Dr. James R. Holly, University of Michigan
- Feb 23, 2022: How WPI Researchers Can Support Worcester City Goals, an event aimed at increasing collaboration between WPI and the City of Worcester, led by Steve McCauley
- Mar 22, 2022: Getting Going on Good: Developing Curricular Collaborations among STEM and Social Science faculty, led by Catherine Buell, author of Math and Social Justice
- Mar 31, 2022: From the Engine of Innovation to the Caring University, a talk by Dr. Lee Vinsel:
- Apr 22, 2022: Are you prepared for your role as an Engineer in public policy debates? A talk and workshop led by Deb Stine, PhD, founder of Science & Technology Policy Academy
- February to April, 2022: Faculty and Staff reading & discussion group: Olúfe mi
   O. Táíwò's Reconsidering Reparations, (faculty choice)

# Social Justice Summit: In Light of the Future we Have Yet to Make (November 14-16, 2021)

We put together a program of events over 3 days under the banner of WPI's first annual Social Justice Summit.

• **Dr. Meredith Broussard** delivered the keynote address for the SJS, *Public Interest Technology, Artificial Intelligence, and Social Justice*, that brought the issues which she details in her book, 'Artificial Unintelligence: How Computers Misunderstand the World' (2019) to bear on the themes of the SJS. <a href="https://www.youtube.com/watch?v=m2da1Mm3e5E">https://www.youtube.com/watch?v=m2da1Mm3e5E</a>

- **Mobilities Justice panel:** This panel brought together Mimi Sheller, a pioneer in mobities studies, to talk about her work on mobilities justice, with an interdisciplinary and interdepartmental group of 6 faculty members who are also doing work in mobilities justice: in the areas of transportation and health care (Shams Bhada and Jennifer DeWinter), migration and LatinX identity in the Americas (John Galante), urban planning technologies and social justice (Katherine Foo), and immigration courts and data analytics (Andy Trapp and Geri Dimas). <a href="https://www.youtube.com/watch?v=Mu1jhnhdHhI">https://www.youtube.com/watch?v=Mu1jhnhdHhI</a>
- Storytelling and our Science: TMI event for the WPI public: This event brought the 6 participants in the TMI story writing/storytelling workshop over the summer to do a 'Moth Radio Hour'-type event for the WPI Public (not recorded due to the sensitive nature of personal storytelling).
- Open educational resources workshop Marja Bakermans, Lindsay Davis, Crystal Brown, Sarah Stanlick, and Rebecca Moody offered this hands-on workshop that trained faculty in using OER technology and online platforms to co-produce open access education materials with students and other partners, for use across the curriculum.

### PIT-Fest (March 30-31, 2022)

2021/22 was a tragic year at WPI, as our community lost 7 students to suicide. WPI joined the nation in recognizing the importance of emphasizing mental health among young people and reexamining our values and priorities as an institution of learning. After reading Dr. Lee Vinsel's book, *The Innovation Delusion*, we came to recognize that this crisis was fundamentally an issue of public interest technology, and that the institutional obsession with innovation (i.e., the new, the advanced, high technology) is at times incompatible with critical reflection, thoughtfulness, and care for self and others. We invited faculty and staff to join us in a group reading and discussion of *The Innovation Delusion*, and we invited Dr. Vinsel to be the keynote speaker for PIT-Fest. He visited our campus for a full day engaging campus through his talk, 'From the Engine of Innovation to the Caring University', a PIT networking event on campus, and an evening social event for our cohort.

Lisa Stoddard and Riky Hanlan, in cooperation with other stakeholders at WPI, organized the 1st annual, 'Careers in the Public Interest: A Networking Event'. This event brought over 50 professionals, designers, activists, scholars, and practitioners from a wide range of fields related to the public interest, including environmental scientists working on keeping the public water supply safe, creators of tech clothing designed to keep bicyclists safe on busy roads, and urban farmers using hi-tech solution to food deserts in Worcester's inner city. The 2nd annual Careers in the Public Interest event is being planned by WPI's career development center for 22/23.

# 2.d) Dissemination and advocacy:

Our dissemination and advocacy strategy had three major audiences: larger academic community, WPI community, and local community in Worcester.

#### Academic communities

In collaboration with Ben Nephew (a signature project lead), PIs Elgert and Telliel presented our initial findings from the storytelling workshop at an Engineering, Social Justice and Peace conference in June 2021 (the title of the representation was "Stories are Data: Using Stories to Build Understanding & Community around Public Interest Technology"). At the same conference, PI Elgert also presented a paper bringing critical insights from her work on experts and expertise to the ongoing public interest technology conversations (the title was: "Political Design and the Power of Experts"). PIs Elgert and Telliel have mentored junior researchers at WPI and helped them connect with PIT-UN researchers. The three junior WPI faculty members (one in Robotics Engineering, one in Computer Science, and one in Systems Engineering) have incorporated a substantial amount of PIT thinking into the conceptualization of the broader social impacts of their research. In addition, they have used a PIT-centered social impact approach in their grant applications. Because researchers are still at the initial stages of their projects, we do not have any documented evidence of success. However, we expect that as these researchers mature their research projects with the help of grant funding, they will continue to benefit from the intellectual resources of PIT-UN and contribute to the visibility of PIT in grant writing space.

PIs Elgert and Telliel have introduced PIT-UN resources to two prestigious NSF-funded research traineeship programs (one on 'Data-Driven Sustainable Engineering for a Circular Economy' and the other on 'Robots in the Future of Work'). PIT-UN's model of engaged scholarship has been a significant encouragement for graduate student trainees who look for alternative STEM careers outside of the private sector. PI Telliel has articulated a PIT methodology for two new research projects that recently received funding from NSF. One of these is a collaborative project with the City of Worcester that focuses on the use of robotic technologies in the municipal plan of climate change adaptation, and the other is a collaborative project with nonprofit organizations in Central Maryland that aims to build an equitable and just sharing economy with the use of algorithmic mechanism design. In an academic article that will appear in 2023, PIs Elgert and Telliel will share their experience of developing a PIT methodology in STEM research space.

We see our engagements with the academic community primarily as a way of entrenching PIT concepts and sensibilities in the way researchers and educators think about scholarship. We think that this is important to break away from the traditional tendency to see STEM research and PIT inquiries as two separate areas.

# WPI community

In addition to the community events we discussed in the previous section, we have prioritized website development and podcast creation in our efforts to make PIT more visible on campus.

• We have designed the JustT Collab website as a platform to connect with the WPI community and beyond: <a href="https://iustt.wpi.edu/">https://iustt.wpi.edu/</a>

- Farley Chery, a signature project lead, has created a website showcasing his work in the Rigs of Color project: <a href="https://rigsofcolor.com/">https://rigsofcolor.com/</a>
- In collaboration with PI Telliel, Berk Calli, another signature project lead, has created the first environmental robotics portal (of the English-speaking world): <a href="https://www.environmental-robotics.com/">https://www.environmental-robotics.com/</a>
- PI Telliel and Berk Calli worked with a student team who created a story-based robot ethics website for their peers: <a href="https://wp.wpi.edu/robotethics/">https://wp.wpi.edu/robotethics/</a>
- PIs Elgert and Telliel have collaborated with WPI's Global Lab, creating two podcasts focusing on PIT:
  - An interview with PIs Elgert and Telliel: https://open.spotify.com/episode/2m2ZQdqcM6LFwbQWG7CZoR
  - An interview with Dr. Lee Vinsel, Associate Professor of Science, Technology, and Society at Virginia Tech, who talked about his book "The Innovation Delusion": https://open.spotify.com/episode/oUnM4FtvXzoFmoU5cQxQMz

### **Worcester Community**

We have worked closely with Adrienne Linnell, Quinsigamond Community College's STEM Initiatives Program Director. Linnell has become the bridge between WPI and QCC faculty and staff. Linnell has helped us connect with QCC faculty and staff who are committed to social justice and STEM. We have circulated information about almost all of our events on the QCC campus. Linnell and a few QCC faculty participated in several of these events. While we were not able to attract QCC students to talks and other events, many QCC students participated in PIT-fest's career event.

Because of the challenges of the pandemic on QCC students (most of whom are coming from under-resourced communities) and faculty (who were primarily occupied with the goal of helping their students navigate college education with minimal resources), we were not able to establish a sustained dialogue. However, our interactions with QCC faculty and staff has helped us better frame what a successful PIT dialogue would look like between WPI and QCC. This is what we are putting into practice this year.

One of our goals was to initiate a dialogue on PIT with the City of Worcester officials. We have been able to establish connections with the Office of Urban Innovation and the Department of Sustainability and Resilience. Steve McCauley, a faculty member who joined the PIT-UN grant team later, led the initial stage of coordination with the City of Worcester (we invited Steve to join WPI's PIT group because of the close alignment between PIT and his work on urban data and climate resiliency). In February 2022, with the support of the PIT-UN grant, McCauley organized an event in which WPI researchers and the City of Worcester officials had an honest conversation on the needs of the City and how to reconcile such practical needs of the City with the researchers' academic inquiries. This conversation has given one of its fruits: Luba Zhaurova who is the Director of Projects at the Department of Sustainability and Resilience is currently part of a WPI-led research project focusing on robots and the City's climate adaptation plan.

# 3) Challenges or lessons learned

Networking virtually and techno-fatigue: Our project plan was heavily focused on networking and community building and relied on face-to-face meeting, campus visits, and event organization. COVID restrictions placed severe restrictions on how we could carry this out. We did pivot to technology-intensive programming, using Zoom and webinars in place of live events. Given Zoom-fatigue, however, among faculty and staff who were now constantly on Zoom, we found the appetite for more virtual engagement was limited. Project extensions helped us deal with this, but the COVID crisis also took extensions, and while we hoped we could resume with our original plans at every turn, we were just not able to until the very end of the project. Looking back, it would have been helpful to sit down and come up with a wholescale contingency/alternative plan for the project rather than postponing and delaying. It would have served us to do the same with Signature Project Leads, to help them reimagine what they could do under the new circumstances. That being said, we are very happy and proud of what we were able to do, despite this challenge.

**Breadth and Reach:** The second main challenge was somewhat more anticipated, and relates to our intention to do the early ground work to introduce the concept and discourse of public interest technology to the WPI community. We designed the project, with diverse signature projects and community building events, in a *broad* way, so that individuals could connect to it from their own interests, positions, and perspectives. Yet the challenge remains, in the context of our broad approach, to consolidate a compelling, shared understanding of PIT.

**Depth and Collaboration:** Related to this second challenge were the limits to the potential collaboration generated by the project, given our broad approach to PIT. Our broad and diverse approach was intentional; it intended to be inclusive and to help launch peoples' imagination of what PIT can be and mean. We were able to connect individuals from around campus, who found common interests and perspectives. The PIT events generated meaningful connection and mutual support. We may, however, have seen more scholarly, collaborative output, had our approach been a bit deeper and more directed. But the seeds of such results may well have been planted during this project, and may materialize over the longer term. Our subsequent work in PIT will be more focused and develop cohorts in thematic areas, while continuing to foster connections between diverse scholars.

# 4) Equity, Diversity, and Inclusion

Our focus on technology and social justice created a natural link with many (if not most) of our programming and support and DEI concerns and initiatives. Many of the signature projects and events we sponsored and hosted through the PIT project (and advancing the discourse of public interest technology at WPI) addressed DEI directly in both student-facing and faculty/staff-facing ways.

**Social justice in STEM education:** This 'signature project' hosted several events relating to social justice in STEM education, including hosting a campus visit and talk by

Dr. James Holly Jr., Assistant Professor of Mechanical Engineering at University of Michigan. His talk was titled, 'Reflections on Being Black and Male in Engineering'. These signature project leads also hosted a panel, "Getting going on good: Developing Curricular Collaborations among STEM and Social Science Faculty'. This panel included Jenn Berg, Catherine Buell (co-editor of 'Social Justice in Mathematics), and Danette V. Day, who shared their experience of collaboration among faculty from math, education, and sociology on the development of a social justice-themed statistics courses. The panel served as a 'how-to' for WPI Mathematics, Data Science, Computer Science, and Engineering faculty to incorporate more inclusive and illustrative case studies, problem sets, etc. in their classes.

Addressing exclusionary practices in the application of technology: Many project activities helped participants question the often-supposed neutrality of technology, and led students, staff, and faculty to discuss how technology 'discriminates' and how this can be addressed. Meredith Broussard spoke to students, staff, and faculty about how artificial intelligence embeds the same dimensions of discrimination that exist in the wider world, and how the supposed neutrality of AI can 'gloss over' or hide these discriminations. Farley Chery, for example, used his signature project support to address the lack of diversity in animation characters. In his signature project, Aaron Sakulich helped facilitate access to appropriate, low-cost technology for citizen-scientists to gather data on water quality and thus participate in local water governance.

# 5) Network Impact

**One and Many / Multiple PIT paths:** WPI's PIT project goes beyond the traditional focus areas of PIT such as computer science, information sciences, and data sciences. We have worked with engineers, applied scientists, social scientists, humanities researchers, global learning experts. Given the centrality of technology in many engineering, science, and humanities fields, and that many disciplines have something to contribute to the growth of PIT, we believe that PIT should be a priority in different fields.

A Model for PIT in Global Service Learning: One of the unique aspects of WPI's PIT project is that it is building on WPI's long-standing interest and investment in global service learning. PIT-UN was born as a US-focused movement. As the movement grows, it has attracted attention from other sides of the world. One manifestation is that PIT-UN is now ready to accept non-US institutions as members. It is reasonable to expect that the PIT movement will become an international movement—at least a movement with strong appeal to global debates on tech (perhaps at UN-level discussions) and significant participation from non-US institutions. Even as a US-focused movement, PIT-UN has drawn on the internal diversity of the U.S. Engaging with this diversity have already required the Network to acknowledge that a US-only-focus might be imposing a homogeneity that doesn't exist. Indeed, sometimes a PIT-related concern (access to technology) in an under-resourced neighborhood in a US city is about the structure of power that also exists in an under-resourced town in the Global South.

Towards a Global PIT Research Agenda: The conversations that WPI's PIT project has been especially fruitful in this regards. WPI's membership coincides with the introduction of a Global School at WPI. Laureen Elgert, one of the PIs, became the first chair of the Department of Integrative and Global Studies (DIGS) under the Global school. The DIGS and Global School faculty have incorporated PIT into their teaching, advising, and scholarship. In our current PIT project, we have 6 colleagues (4 faculty, one staff, and one graduate student) from DIGS and the Global School. Furthermore, WPI's Institute of Science and Technology for Development (InSTeD) has been active in connecting PIT to a number of international development projects in Sub-saharan Africa. The PIs are currently working on a publication that examines the premise of a PIT curriculum for global learning.

**PIT Website:** We are in the process of polishing our website for wider circulation. Our website has become an archive of PIT stories of the researchers and educators we have worked with. We are planning to share the website with the broader PIT-UN community.

# 6) Institutionalization of Public Interest Technology

JustT Collab / Collaborative for Transformative Justice and Technology: We institutionalized an intellectual and scholarly space for PIT at WPI. It took the form of a collaborative. We wanted to highlight the horizontal connections that make public interest technology possible in academia and beyond. In order to capture the interdisciplinary and transdisciplinary nature of PIT scholarship, we picked the collaborative model for us. Throughout our grant, we heard from many colleagues that while they highlight the importance of administration support, they want room for experimentation and critical room. As DEI has been institutionalized in universities in North America, DEI-adjacent work such as PIT work can be sucked into administrative organization concerns. For this reason, JustT Collab has a bottom-up approach to production and circulation of knowledge. It doesn't have rigid hierarchies.

**Pinning PIT on calendar:** One of our successes has been to put PIT on WPI calendar. Two major events that now carry the mark of PIT are social justice week and PIT-fest career event.

Towards a Worcester PIT alliance: We are in the process of establishing a working group that will help further our work towards introducing a Worcester PIT alliance. We are currently working with Quinsigamond Community College (QCC) and the City of Worcester on different projects. With QCC we have identified a number of shared concerns including access to technology in Worcester communities and equitable learning technologies in QCC, WPI, and Worcester's public schools. In 2022-23--thanks to our new PIT-UN grant--we will organize several meetings with QCC faculty, staff, and students, and create a roadmap for a sustainable PIT alliance model between two schools. As for our work with the City of Worcester, we invited their chief engineers and technologists to WPI and heard about their needs and discussed what kind of university-local government partnership could help them. Our first project focuses on

the use of new technologies in inspection and maintenance work for the buildings owned by the City of Worcester. As part of this project, we are establishing a model for public-facing innovation in which the technologies developed as part of the partnership will entail a PIT document that explains the impact of the technology on the public sector. We think that this project will also create a pipeline for WPI graduates to tech jobs in the City.

**DEIJ Grants:** WPI has always had faculty who are interested in the social impact of their research or incorporating social and ethical concerns into their classes. However, there had not been an explicit emphasis on acknowledging these concerns as legitimate areas of scholarship. Our PIT-UN grant has not only made PIT visible, but has also contributed to the rise of a new academic culture in which diversity, equity, inclusion, and justice (DEIJ) are seen at the center of the academic research enterprise. As these are not seen as a matter of personal commitment, WPI introduced a new seed grant program that supports research on DEIJ.

**PIT in Strategic Plan:** 'Public Interest Technology' is currently in the way of being a compass to shape organizational commitments on campus. In faculty meetings, we hear that administrators invoke the idea of 'public interest technology' as a site of socially-responsible and socially-responsive scholarship. This is a sign that PIT is now entrenched in public languages of WPI and, as a concept, it informs ongoing debates about the future of education and research at WPI. Indeed, the Global School's Strategic Plan document mentions PIT-UN as a strategic partner and PIT as an intellectual framework in the section on "Growing Research Initiatives, Scholarship, and External Funding.

#### 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.
- d. Any publications or media generated as a result of your project.

#### EXTRA -- EXTRA -- EXTRA -- EXTRA -- EXTRA -- EXTRA

#### Websites

https://pitcases.org/worcester-polytechnic-institute/

Conference presentations: engineering, social justice, and peace 2021 Telliel, Y., Elgert, L., Nephew, B. Stories are Data: Using Stories to Build Understanding & Community around Public Interest Technology. Engineering, Social Justice and Peace, XV Conference, June 26-27.

2021 Elgert, L. Political Design and the Power of Experts. Engineering, Social Justice and Peace, XV Conference, June 26-27.

# **Signature Projects in the Media**

"With Rigs of Color, Chery is working to create lasting change in the video game and animation industries—by facing its lack of representation of non-white people head-on." Congratulations to #PITUN grantee Farley Chery @WPI on this amazing PIT work! https://t.co/x9AeFe9hbP

(https://twitter.com/NewAmericaPIT/status/1569340053092028417?t=jlubVNCB42V 6IwHG1lm\_3A&s=03)

/index.php/2022/01/31/rigs-of-color-diversifying-animation-characters-lead-by-farley-chery/

<u>Intentional Design Lab</u> <u>Rob Dempsky-</u> student support - Hannah Goodsell, Alex Mintz, Noah Bedard, Mikel Matticoli 5 hrs/ week - build content for <a href="https://justt.wpi.edu/">https://justt.wpi.edu/</a> - descriptor or proposals on website, through podcasts and interviews -

**Podcasts** -https://open.spotify.com/show/7Euw6lvYHiS7ITWnTknI9W Dr. Yunus Telliel and Dr. Laureen Elgert about their research in Public Interest Technology.https://open.spotify.com/episode/2m2ZQdqcM6LFwbQWG7CZoR

Environmental & Green Technology: Biofuels#9-https://open.spotify.com/episode/54MUyjIJvZDeWvMETodHdq

Lee Vinsel, an Assistant Professor of Science, Technology, and Society at Virginia Tech, joins us to talk about his book "The Innovation Delusion". #11 https://open.spotify.com/episode/oUnM4FtvXzoFmoU5cQxQMz

#### **Events**

Lee Vinsel From the Engine of Innovation to the Caring University: A Book Discussion-Thursday, March 31

### Story:

https://justt.wpi.edu/index.php/2022/03/31/from-the-engine-of-innovation-to-the-car ing-university-book-discussion/

Podcast Vinsel was a special guest on WPI's podcast, *Have you heard?*, where he provides additional insight on how the obsession with innovation causes large amounts of stress. It is can accessed on <u>Spotify</u>, for anyone who would like to listen.

# Careers for Sustainable and Just Communities: Networking Event Wednesday, March 30

https://justt.wpi.edu/index.php/2022/03/30/careers-for-sustainable-and-just-communities-networking-event/

Twelve table discussions:

- 1. Renewable Energy, Environmental Science/Engineering Consulting, graduate programs (4 host discussants)
- 2. Environmental, Land Use, Renewable Energy Law; Corporate Sustainability (3 host discussants)
- 3. Design, Sustainablilty, Entrepreneruship, and Social Justice (3 host discussants)
- 4. Nature and Wildlife Protection and Conservation (3 host discussants)
- 5. Green Roofs; climate Resilient and Equitable Food Systems; Regenerative Agriculture ( 3 host discussants)
- 6. Food Security, Sustainability, Social Justice (2 host discussants)
- 7. Water: MA Department of Environmental Protection and Conservation; Worcester Lakes & Ponds (3 host discussants)
- 8. Hazardous Waste, Brownfields, Air Pollution: MA Department of Environmental Protection (3 host discussants)
- 9. (Environmental) Education, Community, and Social Justice (4 host discussants)
- 10. Americorps VISTA (3 host discussants)
- 11. Ecological and Aquatic Landscaping: Permaculture and Arboriculture ( 4 host discussants)
- 12. ZOOM virtual table hosted by two table discussants-<u>Kathy Loftus</u> (Accomplished ESG Professional: cross-sector industry leader, cross-functional team builder, collaborator and change agent in sustainability) <u>Julie Hoben</u> Environmental, Health, Safety, and Sustainability

Getting Going on Good: STEM and Social Science Faculty Panel Thursday, March 24 from 4:30pm to 6pm

https://justt.wpi.edu/index.php/2022/03/24/getting-going-on-good-developing-curricular-collaborations-among-stem-and-social-science-facult/

Developing curricular collaborations: among STEM and Social Science faculty -Hearing the story of collaboration among faculty from Math, Education, and Sociology on the development of a social justice themed statistics course- casual chats to full implementation.

**Jenn Berg, Catherine Buell and Danette V. Day** discuss how their interesting association helped students get a better understanding of math by contextualizing it in humanist issues.

Reflections on being Black and Male in Engineering Dr. James Holly Jr., Assistant Professor of Mechanical Engineering at University of Michigan, 18 October

2021<a href="https://justt.wpi.edu/index.php/2022/02/15/reflections-on-being-black-and-male-in-engineering/">https://justt.wpi.edu/index.php/2022/02/15/reflections-on-being-black-and-male-in-engineering/</a>

# "In Light of a Future We Have Yet to Make": Social Justice Summit, 30 September 2021

https://www.youtube.com/watch?v=m2da1Mm3e5E

Mobilities Justice- Mimi Sheller, WPI Dean of the Global School, Storyhttps://justt.wpi.edu/index.php/2022/02/15/2021-social-justice-summit-thursday/ Video-https://www.youtube.com/watch?v=Mu1jhnhdHhI

# Critical Conversations, Social Justice at WPI: Technology in the Public Interest -Faculty Panelsits:

Farley Chery, Assistant Teaching Professor, IMGD Gillian Smith, Associate Professor, Computer Science and IMGD Aaron Sakulich, Associate Professor, Civil and Environmental Engineering Angela Rodriguez, Assistant Professor, Social Science & Policy Studies Gbeton Somasse, Assistant Teaching Professor, Social Science & Policy Studies 7 October 2020

https://justt.wpi.edu/index.php/2022/02/15/critical-conversations-social-justice-at-wpi-technology-in-the-public-interest/

-

https://www.wpi.edu/news/critical-conversations-program-examines-ways-technology -can-serve-social-justice

Critical Conversations Program Examines Ways Technology Can Serve Social Justice Faculty panel shares thoughts on 'Technology in the Public Interest' -October 13, 2020

Spring Science Week Featured Discussion on Documentary, 'Coded Bias,' Citing Social and Political Impacts of AI- Director/producer Shalini Kantayya led a virtual conversation on findings in her film, 5 May 2020 <a href="https://justt.wpi.edu/index.php/2022/02/15/spring-science-week-featured-discussion-on-documentary-coded-bias-citing-social-and-political-impacts-of-ai/">https://justt.wpi.edu/index.php/2022/02/15/spring-science-week-featured-discussion-on-documentary-coded-bias-citing-social-and-political-impacts-of-ai/</a>

#### TYING THIS INTO THE STRATEGIC PLAN AT

**WPI-**https://www.wpi.edu/sites/default/files/2021/12/03/Pres StrategicPlan 2021% 20%28004%29.pdf

- 1. Student Wellbeing, Access and Affordability,
- 2. Purpose driven education and research,
- 3. Our Inclusive Community

Student Wellbeing, Access and Affordability

- #1Take a holistic and inclusive approach to elevate student well-being across academic and co-curricular experiences, including launching the WPI Center for Well-Being Purpose-Driven Education and Research
- #6 Expand scholarly work at WPI: Grow interdisciplinary discovery and address global challenges such as sustainability, climate change, human health, and socially just technologies, through increased funding, better proposal win rates, and greater student engagement in transformational research for impact on societal problems Our Inclusive Community
- # 1 Build an inclusive campus culture through the implementation of our divisional Inclusive Excellence plans, equitable practices, and inclusive policies #4 Invest in advancing the professional development, well-being, and job satisfaction of faculty and staff: create stronger, more inclusive shared governance
- 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.