#BlackTechFutures Research Institute

Building and Sustaining Black Tech Ecosystems Centered on Joy and History

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Siegel Family Endowment

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



Siegel Family Endowment employs an inquiry-driven approach to grantmaking 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 grantmaking 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 Siegel, co-founder and co-chairman of financial sciences company Two Sigma.



OUR FOCUS ON INFRASTRUCTURE

The internet and emerging technologies have changed the way we engage with one another and our institutions, and reshaped elements that underpin our civil society. The choices and values driving the building and maintenance of our infrastructure shape our future. It's essential that we rethink how to define, design, govern, and fund it. We apply our <u>multidimensional framework</u> for infrastructure to deliver positive community outcomes and address the urgent challenges facing American society.

Strong communities require just and equitable infrastructure – and just and equitable infrastructure require engaged communities. Yet, as a result of excluding the social and physical spheres, inequities persist in the design of digital services and accessibility of those services. How might we increase the meaningful participation and agency of communities to shape the development, deployment, use, and stewardship of the digital infrastructures upon which they rely?



COMMUNITY-DRIVEN DIGITAL INFRASTRUCTURE

Inequities persist not only in access to effective digital services, but in the quality of peoples' experiences online and the ways in which those experiences shape offline communities and physical spaces. These disparities – in connectivity, reliable information, knowledge, opportunities, resources, government services, and more – result in a lack of connectedness and participation in vibrant, healthy communities. We prioritize practices that empower communities in co-creating sustainable digital, social, and physical infrastructures centered on their unique values, needs, and aspirations.





About Grantee

<u>#BlackTechFutures Research Institute</u> is building a national and global network of city-based researchers and practitioners focused on bolstering sustainable local Black tech ecosystems. The Institute provides actionable policy recommendations and a national public data archive that elevates and connects the work of local Black tech ecosystem builders, Black public interest technologists, Historically Black College and University (HBCU) scientists, Black STEM and computer science practitioners, government techies, and Black church futurists. The #BlackTechFutures Research Institute is housed at Stillman College, an HBCU, and draws on the rich histories of Black community-building and activism pioneered by groups like the NAACP and the National Urban League.

Executive Summary

FALLON WILSON, the co-founder and principal investigator at #BlackTechFutures Research Institute, first arrived in Nashville, Tennessee, at the urging of a family member. Wilson hoped to partner with a school district for her social work PhD dissertation research and Nashville seemed promising. Wilson reflects that that invitation more than a decade ago "opened the door to know my life's calling, which is to build a national and global Black tech ecosystem aligned for justice."

In Nashville, Wilson taught technology classes and then assumed a faculty and leadership position at American Baptist College (ABC), a Historically Black College. At the time, participants in the Arab Spring were using technology to mobilize against oppression, and Wilson was struck by the parallels between these efforts and the social justice movements historically nurtured by HBCUs, including ABC. Wilson remembers, "Communities were organizing, using their mobile devices to topple regimes that were oppressive. So instead of teaching technology as a space of innovation, I taught it from the space of social justice and tied it to the history of the school during the Civil Rights Movement."

That framing gave grounding to the work that became #BlackTechFutures Research Institute, now housed at Stillman College, an HBCU in Tuscaloosa, Alabama. #BlackTechFutures conducts research, identifies needs, leverages expertise, and elevates voices in and among local Black communities. Together, these efforts are creating a vibrant, Black Tech Ecosystem rooted in hope and joy, and changing the conversation and framing about public interest technology and community-driven change.

BLACK TECH ECOSYSTEM (BTE)

An ecology of optimized and aligned tech and non-tech Black institutions, organizations, and issues within a citywide system of individuals, organizations, institutions, and communities that make up the tech landscape within a city or state.



 To build equitable tech ecosystems, center Black history and expertise along with those of other historically excluded groups. Black institutions such as Historically Black Colleges and Universities (HBCUs) should not just be consulted but should serve as cornerstones, leading and driving the agenda. Cultural institutions such as HBCUs can translate and hold AI products, deliverables, and outcomes accountable if given culturally relevant public interest tech training and funding.

National and international movements are made possible by place-based work. Lifting up and amplifying communitydriven, place-based work at the municipal level inspires change and offers models that are responsive to community needs that are too often ignored. Taking an ecosystem approach, elevating and connecting local activists and institutions, and providing resources and policy recommendations tailored to particular communities, can help drive change across a larger network.

Do not underestimate the power of joy and hope in social movements. Optimism that is rooted in community and gathering of people permits rich dreams for the future. It should also be grounded in a deep and nuanced understanding of barriers and history.

Not every community has the same definition of "public interest"; resourcing for community-driven digital infrastructure should reflect community needs, rather than a narrow understanding of what constitutes the "public." Institutions and networks that reflect diverse communities and deep histories of activism are important partners and leaders for philanthropy and other mission-driven funders who seek to support initiatives in the public interest.

Core Elements: What Makes the Program Work?

BLACKTECHFUTURES Research Institute's mission is to build Black dreams, champion Black futures, and amplify Black joy in the modern, digital age. It emerged out of a frustration that showed that in all parts of a city's tech ecosystem, Black people faced obstacles and discrimination and that too often technology was taught through the lens of innovation and change, rather than as a social justice space that people could create and use. As such, the #BlackTechFutures Research Institute is centered on the expertise and history of Black institutions, including HBCUs; takes an ecosystems approach; is rooted in joy and hope; and aims to elevate actual Black community needs and competencies.

CENTERING THE EXPERTISE AND HISTORY OF BLACK INSTITUTIONS

WILSON WAS ONLY ONE of a handful of Black people in the room when she attended "tech for good" and STEM education conferences as a leader at American Baptist College. As she listened to the discussion, Wilson felt that HBCUs would bring a critical perspective, expertise, and history to the conversation. "I thought, 'Black institutions could lead in this space because we have always had to do social justice and social impact work," Wilson recalls. Yet Wilson was surprised that many funders in the public interest technology space didn't yet think their organizations were "ready" to invest in Black institutions.

Wilson recognized the need for a movement that saw the value that Black institutions could bring to the conversation. HBCUs, Black churches, Black business communities, Black social organizations, and other institutions are "experts in justice," Wilson <u>argues</u>. "Whether they are nurses or community organizers or social workers, HBCU students are trying to make civil society and democracy and community better," Wilson says. "At HBCUs, we're good at justice. All we need is support to develop the technical skills."

That insight led #BlackTechFutures Research Institute to build an emerging network of HBCUs and a curriculum and program to

BLACK PUBLIC INTEREST TECHNOLOGY (BPIT)

The study, translation, and application of technology to advance the economic, social, emotional, political, and cultural well-being of Black communities such that both the individual and the many Black communities, diasporically, achieve liberation and create joy within their communities. BPIT is grounded in the belief that Black people like <u>Ida B. Wells-Barnett</u> have been translating and applying technology to advance social justice before Predominantly White Institutions (PWIs) made a concerted effort to canonize PIT into a new discipline.



In coordination with CBC Tech 2025, Co-Chairs Rep. Barbara Lee and Rep. Emanuel Cleaver hosted a Congressional Black Caucus (CBC) Briefing in June 2024 with 70 CBC congressional aides and lawmakers on our Black Tech Ecosystem Index.

support the adoption of a framework for realizing a sustainable Black tech ecosystem. Over time, the organization aims to develop similar networks of <u>Black churches</u> and other Black institutions. These cultural institutions can play an important role in holding emerging technologies—including AI—accountable and responsive, but only if they are given culturally relevant public interest tech training and funding. In other words, #BlackTechFutures Research Institute encourages the wide adoption of a Black Public Interest Technology orientation.

BUILDING LOCAL WORK INTO A NATIONAL MOVEMENT

AS A BLACK PERSON AND A WOMAN, Wilson is used to employing a "double consciousness." She <u>reflects</u>, "I don't get to think about only one dimension at a time. Black people are used to having to see big vision and still be hyper-connected to local environments." #Black-TechFutures Research Institute recognizes this vision by working on both the national and local levels. It has developed a general Black Tech Ecosystem Index that can be used in any city with a high or predominantly Black population. The ratings and measurements that an individual city receives guides policy recommendations that can be executed by municipalities, nonprofits, and policymakers to respond to unique barriers that exist within their communities. To date, #BlackTechFutures Research Institute has <u>released city</u> <u>reports</u> for <u>Birmingham</u>, <u>Houston</u>, <u>Memphis</u>, and <u>Nashville</u> and is working with stakeholders in those communities to strengthen their local Black Tech Ecosystems.

Further, #BlackTechResearch Institute works to connect local Black Tech Ecosystems with one another. Wilson <u>says</u>, "A local strategy *is* a national strategy. We are centered on the people, and the people are always local." At the same time, Wilson recognizes that social movements are built on the connections *within* and *between* communities. Wilson <u>cites</u> the example of the Montgomery Bus Boycott, a movement built by Black labor activists, Black women's groups, Black churches, HBCUs, and other institutions, but that also catalyzed other demonstrations of nonviolent, civil disobedience in other locales as part of a larger Civil Rights Movement. The nodes are important, but so are the connections between them. #BlackTechFutures aims to recognize that insight as it develops its network of HBCUs and works to establish relationships between Black communities around the country, and globally, that are working toward similar ends.

BLACK TECH ECOSYSTEMS INDEX (BTE INDEX)

#BlackTechFutures' reimagined Index considers the intersection of six subsystems using a variety of metrics occurring at the interpersonal, institutional, and/or structural levels and creates a series of scores that measure and rate the extent of disparity and guide the corresponding #BlackTechPolicy recommendations. The six subsystems are K-12, Post-secondary, Workforce, Tech Entrepreneurship, Government, and Critical Black Digital Infrastructure. The index consists of 50 variables and 160 metrics.

K thru 12 STEM/STEAM Organizations are both in-school and out-of-school STEM or STEAM programs and organizations that create pathways for Black students to imagine and enter the world of science, innovation, and entrepreneurship.

K THRU 12 STEM/STEAM ORGANIZATIONS

Black Public Interest Technology (PIT) Organizations mobilize Black communities to stand against any form of technology or science that seeks to discriminate against Black people, including bias algorithms, tracking and surveillance, environmental abuses, etc.

BLACK PUBLIC INTEREST TECHNOLOGY ORGANIZATIONS

Black Tech Pipeline Organizations support Black people in tech, STEM, and STEAM fields with skill development, networking, job placements, and capital.

BLACK TECH PIPELINE ORGANIZATIONS

OUR MODEL THE BLACK TECH ECOSYSTEM

Critical Black Digital Infrastructure

HBCUS

There are 101 Historically Black Colleges and Universities (HBCUs) located in 19 states, the District of Columbia, and the U.S. Virgin Islands. The total revenue for HBCUs in 2017-18 was \$8.7 billion, with \$1.9 billion from student tuition and fees. Before and after integration, these colleges enrolled and trained Black <u>students for the new worl</u>ds of work.

BLACK ENTREPRENEURSHIP ORGANIZATIONS

Black Entrepreneurship Organizations are nonprofits created by local Black tech entrepreneurs to address the many challenges facing Black tech startups, including mentorship, training, and access to capital. The bi-vocational founders of these organizations remove barriers for starting and managing local Black tech businesses.

BLACK MULTI-FAITH INSTITUTIONS

Black Multi-faith Institutions are churches, mosques, temples and nonprofits that support social justice from a faith-based perspective. In particular, African Americans identify more often with Black Christian denominations and churches populating the U.S. The Black Church has a notable history of Civil Rights work and Black workforce development.



HBCU Social Science and Humanity Faculty in Black Public Interest Technology Summer Seminar

▶ ROOTING A MOVEMENT IN JOY AND HOPE

WILSON'S GOAL for the future is that her 84-year-old grandmother can say and choose how she wants to engage with technology. Wilson describes that vision as a "world of liberation." Yet it runs counter to the fear, pessimism, and hand-wringing around emergent technology that is so often reflected in the headlines. Policymakers seem primarily interested in proposing bans or guardrails. Philanthropy invests money in technological task forces. Missing from the conversation is what communities themselves—particularly Black communities—are doing or want to do with technology. "Those thought leaders and funders are afraid and fearful," Wilson says. That fear makes it hard to create a proactive social justice-focused movement that is rooted in what is happening and what is needed at the local level.

To address that imbalance, the #BlackTechFutures Research Institute aims to "promote joy," Wilson says. Creating a sense of joy is easier said than done, but like everything that the Institute does, it will be guided by history. "When people gather, they laugh, they sing, they eat together, and they build movement," says Wilson citing the example of Civil Rights Movement activists who came together in HBCUs, Black churches, and other community institutions. Participants need to feel that they have the power to make change and that they have comrades who will fight alongside them. To that end, #BlackTechFutures Research Institute will host an in-person summit, partially funded by <u>National</u> <u>Science Foundation's Innovation, Culture, and Creativity Workshop</u> grants, for HBCUs and the larger Black Community about AI that emphasizes Black joy. Wilson says, "There's no way to move forward unless we figure out how to germinate joy and hope and dreaming."

BLACK JOY

Black Joy is the solution to non-ethical anti-Black artificial intelligence because Black Joy or, as scholar Dr. Robin Kelley (2002), <u>calls it</u> "radical Black imagination," has been the tool used by Black people to live and thrive within American chattel slavery, Jim Crow, and new forms of Anti-Blackness.

#BlackTechFutures Research Institute defines Black Joy as "both the individual sensorial experience and the intersecting corporate collective of Black communion. It is the way, as Black grandmothers would say, 'how we got over.' It is the spiritual fire within our Black multi-faith traditions and the energetic field of our social movements and political organizing and artistic musical freedoms to support democracy and freedom."

Harnessing Black Joy is essential to building unbiased data sets and large language models that ensure Black people are honored by machines while also being a type of heuristical frame for democratizing artificial intelligence futures among various Black communities who are not connected to STEM/STEAM, Computer Science, and Artificial Intelligence conversations. We operationalize Black Joy through communal Black cultural arts and believe that Black Joy is found within counter-public spaces such as Black churches, mosques, and campuses of Historically Black Colleges and Universities. Policymakers seem primarily interested in proposing bans or guardrails. Philanthropy invests money in technological task forces. Missing from the conversation is what communities themselves—particularly Black communities—are doing or want to do with technology.

ALIGNING RESOURCES WITH COMMUNITY NEEDS

THERE IS A PARADOX in the public interest technology field, Wilson says. Too often public interest tech doesn't define and center the public that it seeks to represent. For example, Wilson says, "We are quick to develop and regulate AI, and yet Black and Brown people don't have internet and devices." Wilson also cites the reluctance of philanthropic organizations to invest in HBCU endowments, instead focusing on admitting HBCU students to one-size-fits-all STEM programs that do little to acknowledge and nurture HBCUs' unique competencies and contributions. This predominant framing of the "public good" does nothing to advance equity, and in many cases actively works against it, Wilson says.

#BlackTechFutures Research Institute takes a communitydriven model that seeks to correct this framing. "The problem with all of these framings is that they're missing people at the center of it, they're missing the most vulnerable communities," Wilson says. That is why the Black Tech Ecosystems Index project looks at Black people, organizations, and institutions in particular locales in order to address strengths and needs. The project argues that policies need to be responsive to those needs, drawing on the expertise and institutions that exist. Support for Critical Black Digital Infrastructure, including community anchor institutions, and other positive amenities that strengthen the Black community, is crucial to the realization of a broader vision of technology that is truly in the public interest. #BlackTechFutures Research Institute aims to work with communities, funders, and other stakeholders, in order to reorient their public interest tech work around those needs, in concert with the people who are the movement.

CRITICAL BLACK DIGITAL INFRASTRUCTURE

A subsystem within the Black Tech Ecosystem Index that looks at the role of predominantly Black organizations and Community Anchor Institutions, as well as other positive amenities, within a Black community aimed at strengthening the Black community. The organizations include Black Faith institutions, HBCUs, K-12 Black STEM & CS organizations, Black Public Interest Technology organizations, Black Tech Entrepreneurship Support Organizations, and Black Tech Pipeline Organizations.



In 2024, #BlackTechFutures launched Sistas 4 Digital Equity to support Black Women Public Interest Technologists who work in government at the local, state, and national levels. At the National Digital Inclusion Alliance (NDIA) panel "Sistas 4 Digital Equity: Unhidden Figures, Supporting Black & Brown Women Digital Equity Leaders," they hosted nearly 200 Black and Brown women and allies, who conversed, laughed, snapped, and envisioned Black girl joy for building the digital foundation (e.g. computers, internet access, and digital skills) for an equitable AI future for all.

Impact

#BLACKTECHFUTURES Research Institute is still in its early stages and, like all social justice movements, its journey toward the realization of its vision will require patience, time, and difficult work. But there are early signs that its method and framing is having an impact:

#BlackTechFutures Research Institute has built important connections with HBCUs, helping to extend Black Joy and enable Critical Black Digital Infrastructure:

- #BlackTechFutures Research Institute received a \$500,000 seed investment to incubate at Stillman College, a Historically Black College and University (HBCU), in Tuscaloosa, Alabama
- #BlackTechFutures Research Institute launched the National HBCU Responsible Computing Network with 80 HBCU leaders. The project was supported by Mozilla Foundation Responsible Computing Challenge and Microsoft's Tech for Fundamental Rights.
- #BlackTechFutures Research Institute is hosting representatives of 17 HBCUs at the 2024 Black Public Interest Technology Summer Seminar, building on previous summer training for five HBCUs (Stillman College, LeMoyne Owens College, Prairie View A&M, Lane College, and Meharry Medical College) to help them build institutional capacity for building a diverse Public Interest Technology (PIT) network.

#BlackTechFutures Research Institute is conducting deep, place-base work in Birmingham, Houston, Memphis, and Nashville:

- The organization educated 25 leading local Black tech ecosystem builders across four cities on how to use research and data to build their cities' Black Tech Ecosystems.
- #BlackTechFutures Research Institute conducted assessments to measure, grow, and scale Black Tech Ecosystems in four cities.
- The organization released reports across 50 variables and 160 metrics to understand and create policy recommendations for strengthening the Black Tech Ecosystem in Nashville, Memphis, Houston, and Birmingham, winning a 2024 Anthem Webby Award.

#BlackTechFutures Research Institute is facilitating important dialogues and partnerships among a range of stakeholders:

 The organization hosts an annual national dialogue, <u>Black Tech</u> Policy Week, for policymakers and Black tech experts to discuss how technological advances are shifting how Black people thrive in the U.S, winning a 2023 Anthem Webby Award and garnering more than 6,000 attendees in its second year.

- #BlackTechFutures Research Institute developed a partnership with New America to enroll HBCUs into the Public Interest Technology (PIT) University Network.
- #BlackTechFutures Research Institute hosted public conversations with 100 Black tech experts and policymakers about how to build Black tech futures. Each of these public conversations netted 300 to 1,000 viewers.
- The organization is working with State Broadband Offices in southern states to outline the digital equity needs of Black communities.
- The organization hosted a Congressional Black Caucus Briefing in June 2024 with 70 CBC congressional aides and lawmakers.
- #BlackTechFutures Research Institute launched Sistas 4 Digital Equity to support Black Women Public Interest Technologists who work in government at the local, state, and national levels.

Next Steps

BLACKTECHFUTURES aims to connect and catalyze pieces of Critical Black Infrastructure that is foundational for transformative change. That infrastructure includes a range of institutions and stakeholders, and there are numerous ways to be involved in the movement:

- Leaders, students, staff, faculty, and other stakeholders at HBCUs can reach out via email or LinkedIn to learn more about the Research Institute's curriculum and workshops for HBCUs interested in adopting the emerging Black Public Interest Technology framework.
- Local Black community anchor institutions such as HBCUs, churches, K-12 schools, and other members of the Black tech ecosystem can reach out to #BlackTechFutures for more information about how to become part of the movement.
- Policy makers—local, state, national, and global—can reach out to #BlackTechFutures for how their research can inform policy making for Black communities in the U.S. and internationally.
- Philanthropic foundations and other mission-aligned investors can reach out to #BlackTechFutures to begin a conversation about partnering on this work and learning from Black communities about needs and goals.

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