Some photos in this publication were taken prior to the COVID-19 pandemic and do not necessarily reflect current health and safety guidelines.
Dear friends,

2020 was a year in which celebrating accomplishments felt amiss in the face of all of the heartbreak and challenges that we as individuals, as communities, as nations, and as humanity faced.

The challenges were and still are overwhelming: a global pandemic and the deaths of far too many, systemic racism, increasing economic uncertainty for millions, and more.

In confronting these challenges, we increasingly see the necessity and power of technology, whether it be video platforms for work and socializing or the promising contributions of the use of artificial intelligence in medical applications. But so too are we seeing the disruptive effects of technology, from the proliferation of disinformation to the embedding of racism in the data and technologies that shape our world. We also see an increasing pattern of technology used as a Band-Aid, giving political leaders and sometimes us as individuals excuses not to grapple with the need for systemic change.

If anything, 2020 has reaffirmed the need for the University of Pittsburgh Institute for Cyber Law, Policy, and Security (Pitt Cyber) and like-minded institutions to struggle with how best to develop and critique the development and use of technologies safely, securely, and equitably.

We hope that you will be as excited as we are about the success we continue to have in innovating and collaborating across disciplines here at Pitt, with policymakers, and with industry. We continue to work in the critical space at the intersection of technology, law, and policy and know that this type of transdisciplinary work will be even more vital in the years to come.

Pitt Cyber will continue to take on work wherever we can be most impactful. We hope you will take a moment to read about all we have accomplished in our fourth year and look forward to your continued ideas, insight, and partnership.

Sincerely,

Beth Schwanke
Executive Director
Mission

Pitt Cyber provides a unique transdisciplinary environment for tackling cyber challenges. We bring the breadth of one of the world’s leading public research universities to bear on the critical questions of networks, data, and algorithms, with a focus on the ever-changing gaps among law, policy, and technology. Our team of legal, policy, and technical researchers engages with policymakers and industry to create both actionable proposals to address current demands and fundamental insights to understand the future when it arrives.
Our Work and Impact

Pittsburgh Task Force on Public Algorithms

Pitt Cyber launched the Pittsburgh Task Force on Public Algorithms in January 2020 to study the use of automated decision systems by city and county government and to provide independent recommendations on oversight and accountability.

“The fight for algorithmic fairness and accountability is another frontier in the struggle for civil rights.”
—Esther Bush, president, Urban League of Greater Pittsburgh, and task force member
Decisions shaping our lives are increasingly delegated to algorithms. These data-trained models are determining everything from credit worthiness to hiring to search results. Local governments are turning to algorithms to support decision-making functions that used to be performed by people. Here in Allegheny County, for example, algorithmic tools can help child welfare hotline workers decide when to investigate claims and assist judges in determining bail conditions.

These decision-making support systems offer the promise of predictive big data to support humans, who by their nature are less efficient, less informed, and sometimes biased. The problem is that algorithms are not neutral: They reflect existing biases in our data and society and in the very questions asked of them. Algorithms can reinforce and even accelerate existing discrimination patterns.

Local agencies across the United States are deploying algorithms with little oversight and sometimes little awareness of the potential consequences. The Pittsburgh Task Force on Public Algorithms seeks to establish best practices and practical guidance for those municipalities seeking to ensure algorithmic accountability and equity for all residents. The task force will release its recommendations in 2021 and is consulting across the region to ensure its work reflects community needs and values.

Pitt Cyber is grateful for the generous support of The Heinz Endowments and the Hillman Foundation for this work.
Pittsburgh Task Force on Public Algorithms

Rachel Berger,  
chief, Child Advocacy Center, UPMC  
Children's Hospital of Pittsburgh;  
director, child abuse research, Safar Center for Resuscitation Research, University of Pittsburgh; and  
professor of pediatrics, School of Medicine, University of Pittsburgh

Esther Bush,  
president, Urban League of Greater Pittsburgh

Alexandra Chouldechova,  
assistant professor of statistics and public policy, Heinz College of Information Systems and Public Policy, Carnegie Mellon University

David Danks,  
department head and L.L. Thurstone Professor of Philosophy and Psychology, Department of Philosophy, Dietrich College of Humanities and Social Sciences, Carnegie Mellon University

Christopher Deluzio,  
policy director, Pitt Cyber

Ángel Díaz,  
counsel, Brennan Center for Justice

Courtney Ehrlichman,  
CEO, The Ehrlichman Group

Rosta Farzan,  
associate professor, School of Computing and Information, University of Pittsburgh

Sara Goodkind,  
associate professor, School of Social Work; Department of Sociology; and Gender, Sexuality, and Women's Studies Program; University of Pittsburgh

Ellen Goodman,  
professor, School of Law, Rutgers, the State University of New Jersey

David Harris,  
Sally Ann Semenko Endowed Chair and professor, School of Law, University of Pittsburgh

Yu-Ru Lin,  
associate professor, School of Computing and Information, University of Pittsburgh

Sharon McDaniel,  
founder, president, and CEO, A Second Chance

Michelle McMurray,  
vice president of program and community engagement, The Pittsburgh Foundation

Mark A. Nordenberg,  
chair, Institute of Politics;  
Distinguished Service Professor of Law, School of Law; and chancellor emeritus, University of Pittsburgh

Beth Schwanke,  
executive director, Pitt Cyber

LaTrenda Sherrill,  
lead consultant, Common Cause Consultants, and former deputy chief (education), Office of the Mayor, City of Pittsburgh

Michael Skirpan,  
executive director, Community Forge, and special faculty, Department of Philosophy, Dietrich College of Humanities and Social Sciences, Carnegie Mellon University

Nyssa Taylor,  
criminal justice policy counsel, ACLU of Pennsylvania

Frederick Thieman,  
Henry Buhl Jr. Chair for Civic Leadership, Buhl Foundation; chair, Board of Trustees, Community College of Allegheny County; and former U.S. attorney for the Western District of Pennsylvania

Task force members are serving in their individual capacity.
Government Advisory Panel

The task force is served by an advisory panel of designees from Allegheny County and the City of Pittsburgh.

**Chris Belasco**, manager, data services, Department of Innovation and Performance, City of Pittsburgh

**Erin Dalton**, director, Department of Human Services, Allegheny County

**T. Matthew Dugan**, chief public defender, Allegheny County Office of the Public Defender

**Joanne Foerster**, director of performance and analytics, Allegheny County

**Heath Johnson**, manager, crime analysis, Pittsburgh Bureau of Police

**Laura Meixell**, enterprise data architect, Department of Human Services, Allegheny County

**Shatara Murphy**, assistant director, community affairs, Department of Public Safety, City of Pittsburgh

We also are deeply indebted to the Western Pennsylvania Regional Data Center, Carl DiSalvo (Georgia Institute of Technology), Common Cause Consultants, WBK Legal, Motahhare Eslami (Carnegie Mellon), Hong Shen (Carnegie Mellon), Pitt’s University Center for Social and Urban Research, Ken Holstein (Carnegie Mellon), and Sarah Fox (Carnegie Mellon) for their ongoing contributions.
Election Security

The Blue Ribbon Commission on Pennsylvania’s Election Security and its related body of research provided recommendations to improve Pennsylvania’s election security posture and real-time analysis to help the public make sense of the 2020 election.

The commission’s 2019 recommendations to improve Pennsylvania’s security posture, such as replacing vulnerable voting machines with systems using voter-marked paper ballots, helped to ensure a 2020 election that helped Pennsylvania voters to have faith in the security and integrity of the 2020 election.


The work of the commission, Pitt Cyber’s founding director, David Hickton (now on leave) and Pitt Cyber’s founding director, David Hickton (now on leave) and Pitt Cyber’s founding director, David Hickton (now on leave) has been cited extensively by national and local media. Our recommendations have been endorsed by editorial boards across Pennsylvania and beyond.

Pitt Cyber is grateful for the support of The Heinz Endowments and the Charles H. Spang Fund of the Pittsburgh Foundation in making this work possible.

"The panel has brought heft, clear thinking and many reasonable ideas to the table."

— Pittsburgh Post-Gazette Editorial Board, Feb. 1, 2019
Air Force Association CyberCamp

Pitt Cyber hosted its fourth annual Air Force Association CyberCamp for high school students in summer 2020 in partnership with Pitt Information Technology and Robert Morris University.

The camp is a pillar of Pitt Cyber’s efforts to expand an inclusive pipeline for future technologists and is free for all students. The camp inspires students to take an interest in cybersecurity and other science, technology, engineering, and math (STEM) fields. The interactive curriculum is focused on cyber ethics, systems security, and network security.

Our first-ever virtual camp saw 100 students from across Pittsburgh joining us and 18 instructors from Pitt, Robert Morris, regional high schools, and corporations.

“STEM careers are becoming more in high demand, so it’s up to our generation to make sure the demand is met.”

—a 2020 Air Force Association CyberCamp student

We are grateful to AT&T and to The Grable Foundation for their generous support.
“CyberCamp helped me discover a career path which I am very interested in pursuing.”
—a 2020 Air Force Association CyberCamp student

“Before this camp, I had no experience with cybersecurity. I now feel confident in my abilities.”
—a 2020 Air Force Association CyberCamp student
Pitt Cyber, the School of Computing and Information, the Ford Institute for Human Security at the Graduate School of Public and International Affairs (GSPIA), Pitt Information Technology, and the University Honors College hosted the second annual Hacking4Humanity event with support from Pitt’s Year of Creativity.

In 2019, we called on Pitt students and other area students to create technologies to help prevent human trafficking. Inspired by challenge scenarios developed by GSPIA students, participants created technologies ranging from platforms for smart contracts to prevent labor trafficking to interactive games to educate teens about potential trafficking risks.
In 2020, we hosted a virtual hackathon, asking participating students to create technologies or policy proposals to mitigate disinformation. The competition consisted of three tracks: Tech Proposal, Tech in Action and Policy Proposal. Congratulations to our winners!

**Tech Proposal:**
*Digital Deception: A story-based video game to teach players to identify and mitigate disinformation*

**Hannah Mencer,**
School of Computing and Information, Class of 2024

**Tech in Action:**
*Metis: A people-powered platform targeting disinformation*

**Guangrui Wang,**
School of Computing and Information, Class of 2020

**Policy Proposal (tie):**
*AI-generated Disinformation: A proposal to the National Institute of Standards and Technology and the U.S. House of Representatives Energy Subcommittee on Communications and Technology*

**Alex Zharichenko,**
School of Computing and Information, Class of 2022, and

**Hayden Stec,**
School of Computing and Information, Class of 2022

and

**Addressing Disinformation on Twitter:**
*A proposal to Twitter on mitigating disinformation*

**Briana Wipf,**
doctoral student, Department of English, Kenneth P. Dietrich School of Arts and Sciences
Cyberbullying Prevention and Intervention

Pitt Cyber affiliate scholars Lisa Nelson from the Graduate School of Public and International Affairs, Rosta Farzan from the School of Computing and Information, Mary Ohmer from the School of Social Work, Ana Radovic from the School of Medicine, and Candice Biernesser from the Department of Psychiatry in the School of Medicine are developing a program focused on cyberbullying prevention and intervention in early adolescence thanks to the support of AT&T.

The program, Upstander Junior, is a research-based assembly program for middle schools that includes an ongoing mentoring component to help middle school students fight cyberbullying and builds on AT&T’s Upstander program for high school students.
Scholarship
Pitt Cyber Accelerator Grants

We launched the Pitt Cyber Accelerator Grants (PCAG) program in 2018 to provide initial funding for novel and innovative projects that advance Pitt Cyber’s mission: to bring the breadth of one of the world’s leading public research universities to bear on the critical questions of networks, data, and algorithms, with a focus on the ever-changing gaps among law, policy, and technology.

PCAG funding is used to advance projects that establish and extend key intellectual infrastructures, such as research and teaching in methods with broad application and utility across disciplines, and projects that bring together researchers across fields of interest.
Fall 2020 Recipients

**A Computational Approach to Measuring and Explaining Sophistication and Argumentation in Political Discourse**

Malihe Alikhani, assistant professor, School of Computing and Information

Max Goplerud, assistant professor, Department of Political Science, Kenneth P. Dietrich School of Arts and Sciences

Tessa Provins, assistant professor, Department of Political Science, Dietrich School

**People-Centered Data Analysis**

Michael Goodhart, professor, Department of Political Science, Dietrich School

Jackie Smith, professor, Department of Sociology, Dietrich School

Laura Wiens, executive director, Pittsburghers for Public Transit

**Developing Digitally Mediated Transparency for Police-Community Relations**

Yu-Ru Lin, associate professor, School of Computing and Information

Sera Linardi, associate professor, Graduate School of Public and International Affairs

**The Cyber Ethics Education Accelerator**

Jennifer Petrie, postdoctoral fellow, Joseph M. Katz Graduate School of Business

Cassie Quigley, associate professor, School of Education

Anthony Rodi, clinical associate professor, Katz Graduate School of Business

**A Beacon Approach to Providing COVID-19 Contact Tracing Privacy**

David Tipper, professor, School of Computing and Information

Konstantinos Pelechrinis, associate professor, School of Computing and Information

Mai Abdelhakim, assistant professor, Swanson School of Engineering

Prashant Krishnamurthy, professor, School of Computing and Information

Alexandros Labridnidis, professor, School of Computing and Information

Balaji Palanisamy, associate professor, School of Computing and Information

Jacob Biehl, associate professor, School of Computing and Information

**Virtual Reality Gaming for Military Mission Planning**

Lieutenant Colonel Diana Bishop, commander, Detachment 730, and chair, Department of Aerospace Studies, U.S. Air Force ROTC

**Evaluation of Educational Interventions in Reducing Compromises from Phishing Attacks**

Changran Fan, doctoral student, Katz Graduate School of Business

M. Zia Hydari, assistant professor, Katz Graduate School of Business

Narayan Ramasubbu, associate professor, Katz Graduate School of Business

**Sensing Infrastructure during the Pandemic**

Amy Babay, assistant professor, School of Computing and Information

Jacob Biehl, associate professor, School of Computing and Information

Adriana Kovashka, assistant professor, School of Computing and Information

Olga Kuchinskaya, associate professor, Department of Communication, Dietrich School

Adam J. Lee, associate professor, School of Computing and Information

Stephen Lee, assistant professor, School of Computing and Information

Eleanor Mattern, teaching assistant professor, School of Computing and Information

Spring 2020 Recipients

**Measuring Worldviews: A Map of Stubborn Social Skills**

Rongqian Ma, doctoral student, School of Computing and Information

Lara Putnam, UCIS Research Professor, Department of History, Dietrich School

Lingfei Wu, assistant professor, School of Computing and Information

Investigation of Analogs between Social, Organizational, and Technical Domains for Information Security

Mai Abdelhakim, assistant professor, Swanson School of Engineering

Prashant Krishnamurthy, professor, School of Computing and Information
Disinformation

From the Tree of Life synagogue shootings to the COVID-19 pandemic and the attack on the Capitol, recent events have dramatically spotlighted the dangers of both disinformation that is knowingly disseminated and misinformation that is mistakenly amplified on social media platforms. Messages sowing distrust in experts, vaccines, and democratic institutions have led to deaths and called the continued viability of democracy and liberal international cooperation into question.

With affiliate scholars in computer and information science, law, public health, and the social sciences, Pitt Cyber has been able to foster valuable and unique cross-disciplinary partnerships to help understand and build resilience to this societal-level challenge. These projects also have connected us with partners at Carnegie Mellon University and Duquesne University, further elevating Pittsburgh as a national hub for research on digital literacy, the costs and benefits of regulating surveillance online, and strategies for curtailing foreign influence efforts across democracies.
Disinformation-related efforts that Pitt Cyber participated in this past year included the following:

■ Research and Academic Director Michael Colaresi presented work at Carnegie Mellon on April 6, 2020, titled “Does Not Compute (and Might Self-destruct): Digital Vulnerabilities in the Liberal World Order,” describing how rivals such as Russia are able to disrupt social solutions in and between democracies and what steps can be taken to counteract them.

■ Affiliate scholar Yu-Ru Lin, along with Pitt colleagues Adriana Kovashka and Wen-Ting Chung, received a grant from the National Science Foundation for Countering COVID-19 Misinformation via Situation-aware Visually Informed Treatment.

■ Colaresi joined the launch of Duquesne University’s Carl G. Grefenstette Center for an event titled Disinformation, Misinformation, and Technology: New Ethical Challenges and Solutions on October 7, 2020.

■ Pitt Cyber cohosted a discussion on October 19, 2020, with Carnegie Mellon’s CyLab to discuss the Cyberspace Solarium Commission recommendation with a panel on countering disinformation with affiliate scholar Lara Putnam of Pitt, Kathleen Carley of Carnegie Mellon, and Chris Inglis and Suzanne Spaulding of the Cyberspace Solarium Commission that was moderated by Colaresi.

Research and Publications

Pitt Cyber’s staff and affiliate scholars continue to publish widely. The following are selected publications from 2020.

May 2020 | by Christopher Deluzio, policy director, and Beth Schwanke, executive director, Pitt Cyber

Ensuring Safe Elections: Federal Funding Needs for State and Local Governments during the Pandemic
April 2020 | by Christopher Deluzio, policy director, Pitt Cyber; David Levine, elections integrity fellow, Alliance for Securing Democracy; Elizabeth Howard, counsel, Brennan Center for Justice; Derek Tisler, fellow, Brennan Center for Justice; and Paul Rosenzweig, resident senior fellow, R Street Institute

Democracy Unchained: How to Rebuild Government for the People
March 2020 | Part III (Can Democracy Survive the Internet?) by David Hickton, founding director, Pitt Cyber; edited by David W. Orr, Andrew Gumbel, Bakari Kitwana, and William S. Becker; The New Press

“How Our Misunderstanding of the Digital and Computing Revolutions Puts Democracy at Risk (and What to Do about It)”
May 2020 | by Michael Colaresi; Wiley Online Library

Oyez! Robot (review)
January 2020 | by Michael Madison; Technology Law JOTWELL

Events

Pitt Cyber hosted and participated in a range of events in 2020, including the following:

Threats to the Vote and Democracy in Pennsylvania and Beyond,
hosted by the University of Pittsburgh School of Law and Pitt Cyber

A Strategic Approach to U.S. Cybersecurity with the Cyberspace Solarium,
hosted by Pitt Cyber and Carnegie Mellon’s CyLab

“What’s Next for PA Elections?”
hosted by WITF-FM

Equity and Justice in Government Algorithms Workshop, Pitt Diversity Forum
Preet Bharara in Conversation with Pitt Cyber

“Can Democracy Survive the Internet?”
hosted by The Dick Thornburgh Forum for Law & Public Policy

New Partnerships

In 2020, Pitt joined the Cybersecurity Manufacturing Innovation Institute (CYMANII), a $111 million five-year agreement with the U.S. Department of Energy to encourage American manufacturers and supply chains to adopt secure, energy-efficient approaches. The collaborative research and development approach aims to protect manufacturers against cyber criminals and foreign actors with a focus on securing automation and the supply chain network as well as building a national program for education and workforce development. Daniel Cole, associate professor of mechanical engineering and materials science at the Swanson School of Engineering and Pitt Cyber affiliate scholar, will lead Pitt’s CYMANII efforts and is joined by affiliate scholars from across the University.

Pitt Cyber was invited to join the Aspen Institute Cybersecurity Collaborative Network, which helps civic institutions to maximize their impact on the cyber policy field.

Pitt Cyber also is pleased to partner with Pittsburgh DataWorks and others to host the annual Pittsburgh DataJam for high school students. Pitt Cyber is teaming with the DataJam to bring issues of data ethics and security into the program, including through a grant from Pitt’s Year of Engagement.
Selected Media

The following are highlights of media coverage of work from Pitt Cyber and its affiliate scholars in 2020:

Agents of Chaos
HBO documentary
“What We Must Do to Prevent the Next SolarWinds Hack”
The Hill
“Elections Shaping Up to Become a Major Issue in Legislature”
Associated Press

Pitt Cyber Policy Director Chris Deluzio on PA Election Security and the 2020 Election
WPXI TV

“Suspicious Robocall Campaign Warning People to ‘Stay Home’ Spooks Voters Nationwide”
The Washington Post

“PA Won’t See Full Results on Election Night. Experts Urge Trust in the Process Anyway”
PublicSource

“A Year Ago, Voting Machines Malfunctioned in a Pivotal PA County. Have the Problems Been Fixed?”
The Philadelphia Inquirer

“It’s Going to Be Hell’: How Pennsylvania Is on Track for Election Chaos”
Mother Jones

“Election Security Researchers Agree—Online Voting Isn’t Ready for ‘Prime Time’ ”
EdScoop

“What You Should Know about Cyberbullying: It’s On the Rise amid the Pandemic”
Kidsburgh

“Emails Show Allegheny County District Attorney’s Office Used Trial of Controversial Facial Recognition Software Technology Clearview”
PublicSource

“TikTok’s Massive Data Harvesting Prompts U.S. Security Concerns”
Bloomberg

“Pittsburgh Suspends Predictive Policing Program That Used Algorithms to Predict Crime Hot Spots”
Pittsburgh Post-Gazette

“States’ Automated Systems Are Trapping Citizens in Bureaucratic Nightmares with Their Lives on the Line”
TIME

Election Security Experts Urge Pennsylvania to Begin Planning for Expanded Mail-in Voting This Fall
TribLive

Federal Leaders Must Get Behind Absentee Voting—or Explain Why They’d Prefer Chaos
The Washington Post

Editorial: The High Cost of Safe Elections
TribLive

Groups Urge More Election Security Aid to States
Politico

The Cybersecurity 202: County Election Officials Detail Massive Costs of Remote Voting
The Washington Post

Report Says Congress Needs to Step Up Funding to PA for Election Costs amid Pandemic
Pittsburgh Post-Gazette

Report Finds States Need Millions More in Federal Funding to Hold Elections This Year
The Hill

COVID-19: States to Spend Tens of Millions More on Elections This Year, Study Says
United Press International

TribLive

Battleground 2020: The Polls, Mail-in Voting, and Political Ads
WHYY Radio Times

What Could Mail-in Voting Mean for Pennsylvania in the Age of COVID-19? Seven Experts Weigh In
Public Source

Bill to Postpone PA Primary Heads to Governor’s Desk
Pittsburgh Post-Gazette

How COVID-19 Could Reshape Pennsylvania’s Elections
Politically Inclined Podcast, Pittsburgh Post-Gazette

Who Actually Has the Power to Postpone the Pennsylvania Primary over Coronavirus? And Will They Agree?
The Philadelphia Inquirer

Residents Raise Concerns about Bias in County’s Automated Decision-making Tools
WESA

Reliability of Pricey New Voting Machines Questioned
Associated Press

What Pennsylvania Can Learn from Iowa’s Caucus Debacle—and the Conspiracy Theories That Followed
The Philadelphia Inquirer

New Task Force to Address Bias in Allegheny County’s Automatic Decision-making Tools
WESA

Countering Automation without Representation
David Hickton for The Hill

Lawsuits over Voting Machines in Pennsylvania
NPR

From Russia with Blood
Talking Feds Podcast

Every PA County Will Have New Voting Machines—with Paper Trails—in 2020
The Philadelphia Inquirer
People

Institute Staff

David Hickton, founding director and professor, School of Law, University of Pittsburgh (on leave to serve as staff director and senior counsel to the U.S. House of Representatives Select Subcommittee on the Coronavirus Crisis)

Beth Schwanke, executive director

Michael Colaresi, research and academic director and William S. Dietrich II Chair of Political Science, Department of Political Science, Kenneth P. Dietrich School of Arts and Sciences

Christopher Deluzio, policy director

Kiersten Todt, resident scholar

Sarah Barca, administrative director

Kate Ulreich, information technology consultant, with thanks to the generosity of Pitt Information Technology

David Frisch, intern

Veronica Oviedo, legal intern

Kara Dally, legal intern

Affiliate Scholars

Pitt Cyber’s affiliate scholars are faculty members drawn from across the University.

Kevin C. Abbott, adjunct professor, School of Law

Malihe Alikhani, assistant professor, School of Computing and Information

Kevin D. Ashley, professor, School of Law

Amy Babay, assistant professor, School of Computing and Information

Dmitriy Babichenko, clinical associate professor, School of Computing and Information

Elena A. Baylis, professor, School of Law

Mostafa Bedewy, assistant professor, Swanson School of Engineering

Candice Biernesser, postdoctoral scholar, Department of Psychiatry, School of Medicine

Ronald A. Brand, Chancellor Mark A. Nordenberg University Professor; John E. Murray Faculty Scholar; and academic director, Center for International Legal Education, School of Law

Matt Burton, lecturer, School of Computing and Information

Bruce R. Childers, associate dean for strategic initiatives and professor, School of Computing and Information

William W. Clark, professor, Swanson School of Engineering

Dan Cole, associate professor and director, Stephen R. Tritch Nuclear Engineering Program, Swanson School of Engineering

Mary Crossley, professor, School of Law

Stephanie Dangel, executive director, Innovation Practice Institute, School of Law

Rosta Farzan, associate professor, School of Computing and Information

Morgan R. Frank, assistant professor, School of Computing and Information

Lindsey French, visiting assistant professor, Department of Studio Arts, Kenneth P. Dietrich School of Arts and Sciences

Wei Gao, associate professor, Swanson School of Engineering

Alan D. George, chair, Department of Electrical and Computer Engineering; R&H Mickle Endowed Chair; and director, National Science Foundation Center for Space, High-performance, and Resilient Computing (NSF SHREC Center), Swanson School of Engineering

Michael Goodhart, professor, Department of Political Science, Kenneth P. Dietrich School of Arts and Sciences

Max Goplerud, assistant professor, Department of Political Science, Kenneth P. Dietrich School of Arts and Sciences

Joel M. Haight, associate professor, Swanson School of Engineering

David A. Harris, Sally Ann Semenko Endowed Chair and professor, School of Law
Harry Hochheiser, associate professor, Department of Biomedical Informatics, School of Medicine

Jingtong Hu, assistant professor, Swanson School of Engineering

M. Zia Hydari, assistant professor, Joseph M. Katz Graduate School of Business

Alex Jones, professor and associate director, NSF SHREC Center, Swanson School of Engineering

Kate Joranson, head librarian, University Library System

James Joshi, professor, School of Computing and Information

Michael Kenney, associate professor and program director, international affairs, Graduate School of Public and International Affairs

Mario Khreiche, postdoctoral researcher, Department of History, Kenneth P. Dietrich School of Arts and Sciences

Maria Kovacs, professor, Department of Psychiatry, School of Medicine

Prashant Krishnamurthy, professor, School of Computing and Information

Howard A. Kuhn, adjunct professor, Swanson School of Engineering

John R. Lange, assistant professor, School of Computing and Information

Alison Langmead, clinical associate professor and director, Visual Media Workshop, Department of History of Art and Architecture, Kenneth P. Dietrich School of Arts and Sciences, and associate professor, School of Computing and Information

Adam J. Lee, associate dean and associate professor, School of Computing and Information

Stephen Lee, assistant professor, School of Computing and Information

Yu-Ru Lin, associate professor, School of Computing and Information

Sera Linardi, assistant professor, Graduate School of Public and International Affairs

Michael J. Madison, faculty director, Innovation Practice Institute, and professor, School of Law

Eleanor Mattern, teaching assistant professor and director, Sara Fine Institute, School of Computing and Information

Lucas Mentch, assistant professor, Department of Statistics, Kenneth P. Dietrich School of Arts and Sciences

Daniel Mossé, professor, School of Computing and Information

AUDREY J. MURRELL, associate dean and director, David Berg Center for Ethics and Leadership, Joseph M. Katz Graduate School of Business

Lisa S. Nelson, associate professor, Graduate School of Public and International Affairs

Mary L. Ohmer, associate professor, School of Social Work

BalaJi Palanisamy, professor, School of Computing and Information

Jennifer Petrie, assistant director, David Berg Center for Ethics and Leadership

Michael Poznansky, assistant professor, Graduate School of Public and International Affairs

Lara Putnam, UCIS Research Professor, Department of History, Kenneth P. Dietrich School of Arts and Sciences

Cassie F. Quigley, assistant professor, School of Education

Stephen Quigley, lecturer, Department of English, Kenneth P. Dietrich School of Arts and Sciences

Ana Radovic, assistant professor, Department of Pediatrics, School of Medicine

Amin Rahimian, assistant professor, Swanson School of Engineering

Gregory Reed, director, Center for Energy and Energy Grid Institute, Swanson School of Engineering

Anthony Rodi, interim associate dean, College of Business Administration, and clinical associate professor, Joseph M. Katz Graduate School of Business

Julia M. Santucci, senior lecturer and director, Johnson Institute for Responsible Leadership, Graduate School of Public and International Affairs

Jaime E. Sidani, assistant professor, Department of Medicine, and assistant director, Center for Research on Media, Technology, and Health, School of Medicine

Jonathan Silverstein, chief research informatics officer and visiting professor, Department of Biomedical Informatics, School of Medicine
Affiliate Scholars continued

David Tipper, professor, School of Computing and Information

Albert C. To, associate professor; CNG Faculty Fellow; director, MOST-AM Consortium; and director, ANSYS Additive Manufacturing Research Laboratory, Swanson School of Engineering

Annette Vee, assistant professor, Department of English, Kenneth P. Dietrich School of Arts and Sciences

Götz Veser, professor and associate director, Center for Energy, Swanson School of Engineering

Brian Vidic, director of partnerships, Office of Economic Partnerships

Martin B.H. Weiss, professor and chair, Department of Informatics and Networked Systems, School of Computing and Information

Phil Williams, professor and director, Matthew B. Ridgway Center for International Security Studies, Graduate School of Public and International Affairs

Christopher E. Wilmer, assistant professor, Swanson School of Engineering

Lingfei Wu, assistant professor, School of Computing and Information

Judith Chun-Hsu Yang, William Kepler Whiteford Professor, Swanson School of Engineering

Bo Zeng, assistant professor, Swanson School of Engineering

Taieb Znati, professor emeritus, School of Computing and Information

Affiliate Practice Scholars

Pitt Cyber’s affiliate practice scholars are drawn from the realms of industry and policy.

Lieutenant Colonel Diana Bishop, Detachment 730 commander and professor, Department of Aerospace Studies, U.S. Air Force ROTC

Michael A. Comber, partner, Farrell & Reisinger, LLC

Akshana Dassanaike-Perera, CEO and cofounder, Steel City Codes

Christopher A. Geary, unit chief, Cyber Initiative & Resource Fusion Unit, FBI Cyber Division

Brian Geffert, global chief information security officer, KPMG International

Bob Gradeck, project manager, Western Pennsylvania Regional Data Center

James T. Kitchen, partner, Jones Day

John Kropf, corporate privacy executive, Northrop Grumman

Martin Lindner, managing principal consultant, SecureWorks

Leona Mitchell, professor of practice, School of Computing and Information

Keith Mularski, advisory executive director of cybersecurity, Ernst & Young LLP

Harvey Rishikof, director of cybersecurity, Applied Research Laboratory for Intelligence and Security, University of Maryland

Claire Shao, chief financial officer, Steel City Codes

Sean Sweeney, senior director and chief security advisor, Cybersecurity Solutions Group, Microsoft

Josh Zhou, chief operating officer and cofounder, Steel City Codes

With Gratitude

Pitt Cyber is truly a University-wide effort. We are grateful for collaborations from across the University. Pitt Cyber owes a particular debt of gratitude to the Office of the Chancellor, the Office of the Provost, the Office of University Counsel, Pitt Information Technology, and the School of Law. We also are grateful for the constant support of the Division of Philanthropic and Alumni Engagement and the Office of University Communications and Marketing.