

## Annual Report 2023 Institute for Cyber Law, Policy, and Security







#### Dear friends,

What a year 2023 has been.

Our work at the intersection of technology, law, and policy has felt more critical than ever. As generative AI continues to dominate headlines, board rooms, and governments, the University of Pittsburgh Institute for Cyber Law, Policy, and Security (Pitt Cyber) continues to provide timely, practical policy advice and commentary. Our efforts to strengthen accountability and transparency in municipal governments, the federal government, and multilateral institutions are bearing fruit.

Our work in cyber education and workforce development remains a highlight for me personally and, I hope, for many students across the region. We were pleased to discover that the White House felt the same when our annual high school CyberCamp was highlighted in discussions about workforce development in our region.

Our research and programming at the Pitt Disinformation Lab, which strengthens information ecosystems and resilience in our region, are particularly important as we head into the 2024 election cycle.

And, as always, I am inspired by the research and teaching our affiliate faculty are doing across campuses at Pitt—and their resonance for our world.

Please join me in celebrating Pitt Cyber's impact in 2023. We are grateful for your continued partnership.

Sincerely,

David Hickton Founding 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 collective 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 as it arrives.

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### **Our Work and Impact**



Artificial intelligence (AI) technologies are increasingly shaping our world. These systems are influencing what we read, who we date, what we buy. They can determine who goes to prison, who gets a mortgage, and who gets a kidney.

Generative AI has captured the attention of the public, markets, and governments. From the deeply personal to the societal to the nation-state, the impact of AI is arguably already transformative in ways we have yet to address or even understand.

These technologies present both extraordinary promise and extraordinary risk. Pitt Cyber's work on AI explores how we can ensure that governance of these technologies leads to equitable, transparent, and accountable outcomes.

We concluded our work on the Pittsburgh Task Force on Public Algorithms, which was supported by The Heinz Endowments and The Hillman Foundation, by sharing the results of a survey of Allegheny County residents' perceptions of the use of municipal public algorithms, a collaboration with researchers from across the University of Pittsburgh and Carnegie Mellon University. We also shared a prototype for an Al and algorithmic registry for municipalities, led by the Western Pennsylvania Regional Data Center, and a citizen toolkit for engaging on the municipal use of AI and algorithms.

Building on the success of the Pittsburgh Task Force on Public Algorithms, Pitt Cyber is continuing its work on Al governance and accountability. Our work was recognized by the U.S. Department of Commerce. We were honored to host the launch of the department's work on Al accountability with a visit from Assistant Secretary of Commerce Alan Davidson.

Pitt Cyber also weighed in with government agencies via public comment. We provided recommendations to the U.S. Office of Management and Budget about the role of federal chief AI officers. risks of automation bias, and more. We submitted comments to the U.S. <u>Department of Commerce</u> about the need for AI accountability measures to embrace socio-technical characteristics. And we shared our expertise with the United Nations Multistakeholder Advisory Body on Artificial Intelligence, recommending that the UN develop technical assistance for low- and middleincome countries related to AI governance.

We also delved into the <u>gendered</u> <u>sources</u> of Chat GPT-3 Training Data and began new work on municipal procurement of AI, AI workforce, and more.



Watch "Al Accountability Policies: A discussion with Assistant Secretary Alan Davidson".

Pittsburgh Task Force <sup>on</sup> Public Algorithms

> Watch "Pittsburgh Task Force on Public Algorithms Citizens Toolkit".

## **Pitt Disinformation Lab**

The Pitt Disinformation Lab (PDL) continues its research and programming to build resilience to the disinformation that threatens our health, undercuts our security, and undermines our democracy.

PDL works closely with trusted community organizations to improve the information ecosystem in Western Pennsylvania. In 2023, it partnered with libraries and civic organizations to offer programming about election administration, health misinformation, and other topics.

PDL also launched a first-of-its kind survey to study trust and perceptions of disinformation in Southwestern Pennsylvania in collaboration with researchers in the School of Social Work and the Center for Social and Urban Research, with results forthcoming in 2024. PDL also is developing an open-source modeling infrastructure that includes tools for simulation-based methods of exploring how platform rules influence the spread and impact of disinformation, calibrating our models with data on the distribution of trust and distrust in expertise and demographics for local communities.

PDL is continuing its partnership with a collaborative group of researchers from across Pitt to create open education resources for nursing students about mitigating disinformation in patient care settings.



Watch "Studio C70 goes across the state to talk with Beth Schwanke of Pitt Cyber" on YouTube.

## Pitt Cyber is grateful for the support \_\_\_\_\_

for PDL from the Henry L. Hillman Foundation and the Steven D. Manners Research Development Award.



## Air Force Association CyberPatriot Camp

Pitt Cyber hosted its seventh annual Air Force Association CyberCamp for high school students in summer 2023, in partnership with Pitt IT.

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 STEM fields. The interactive curriculum is focused on cyber ethics, systems security, and network security.

2023 saw nearly 150 students from across Pittsburgh joining us, with instructors from regional high schools, the University of Pittsburgh, and corporate volunteers.

Our camp was celebrated by the White House for its impact on and commitment to the nation's cyber workforce development during First Lady Jill Biden's November visit to Pittsburgh as well as by the Office of the National Cyber Director.

Read the full story from The White House.





Pitt Cyber is grateful for the support from EQT Foundation and The Grable Foundation.

# 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 everchanging 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.

## 2023 Recipients

#### Improving User Privacy Awareness in the Metaverse Using Adversary-based Game

**Na Du**, Assistant Professor, Department of Informatics and Networked Systems, School of Computing and Information

**Balaji Palanisamy**, Associate Professor, Department of Informatics and Networked Systems, School of Computing and Information

To build trust and promote responsible utilization of Metaverse technologies as well as to address privacy challenges and concerns raised by users, the project aims to establish a series of adversarybased games that simulate reallife privacy challenges, delve into individuals' privacy attitudes, and foster their comprehension of existing privacy policies.

#### The PITT Initiative on Computational Social Science Seminar: A Crossroads for Research and Collaboration at Pitt

**Morgan Frank**, Assistant Professor, Department of Informatics and Networked Systems, School of Computing and Information

Across the School of Computing and Information—and the University of Pittsburgh—researchers and students use statistics, data science, and computer science to study economics, political science, urban science, library science, and many other areas of social science. The PITT Initiative on Computational Social Science (PittCSS) offers a crossroads for all researchers and students at Pitt and beyond to share their research, encounter new ideas, and grow the academic network. PittCSS creates a diverse community of researchers, an opportunity for both students and faculty to share their research, and an opportunity to incubate new multidisciplinary collaborations that jump-start research careers.

## Selected Honors and Awards

Pitt Cyber Affiliate Scholars' scholarship and teaching continued to receive recognition across the University and beyond.

Pitt Cyber Affiliate Scholars **Mai Abdelhakim** and **Dmitriy Babichenko** were awarded 2023 Innovation in Education Awards by the Provost's Advisory Council on Instructional Excellence.

Pitt Cyber Affiliate Scholars **Mostafa Bedewy** and **Lingfei Wu** received National Science Foundation Faculty Early Career Development Program (CAREER) awards.

Pitt Cyber Founding Director **David Hickton** was invited to join the Center for Strategic and International Studies as a nonresident senior advisor to its Strategic Technologies Program as well as to join The Azure Forum for Contemporary Security Strategy as a distinguished fellow.

Pitt Cyber Affiliate Scholar **James Joshi** received a National Science Foundation Director's Award for exemplary public service and leadership in advancing privacypreserving capabilities within data and analytics learning.

Pitt Cyber Affiliate Scholar **Sera Linardi** was named the first executive director of EAAMO: Equity and Access in Algorithms, Mechanisms, and Optimization as a Siegel Public Interest Tech Faculty Impact fellow at Cornell Tech in 2024. Linardi also was the recipient of a 2023 University of Pittsburgh Chancellor's Distinguished Service Award for her work founding the Center for Analytical Approaches to Social Innovation.

Pitt Cyber's research and academic director, Yu-Ru Lin, was selected (along with coprincipal investigator Deborah Wheeler of the U.S. Naval Academy) as one of six university faculty teams to pursue fundamental social science research through the Defense Education and Civilian University Research Partnership, a program under the U.S. Department of Defense's Minerva Research Initiative, for her project, Characterizing and Countering the Normalization of Extremism and Communal Violence in Cyber-Social Space. Lin also was awarded a National Science Foundation grant to study the online behavior of U.S. officials across social platforms.

Pitt Cyber Affiliate Scholar **Balaji Palanisamy** and his former students received a Distinguished Paper Award at the 30th ACM Conference on Computer and Communications Security for their work, "How Hard Is Takeover in DPoS Blockchains? Understanding the Security of Coin-based Voting Governance."

Pitt Cyber Affiliate Scholar **Amin Rahimian** received a National Science Foundation award to develop a privacy-preserving framework for research on private, encrypted social networks.

Pitt Cyber Affiliate Scholar **Julia Santucci** was appointed to the President's Intelligence Advisory Board.

## **Publications**

Pitt Cyber's affiliate scholars published widely in 2023, including the following:

"Alexa, Activate Cyber Resiliency," December 2023 | Azure Forum | David Hickton

"Pitt Cyber Comments to OMB's Federal Agency Use of Al Memo," December 2023 | David Hickton

#### "Who Authors the Internet? Analyzing Gender Diversity in ChatGPT-3 Training Data,"

October 2023 | Jessica B. Kuntz and Elise Silva

#### "Pitt Cyber Recommendations to UN Multistakeholder Advisory Body," September 2023

| David Hickton, Jess Kuntz, and Beth Schwanke

#### "Pitt Cyber Comments to NTIA's AI Accountability Policies," June 2023 | David

Hickton and Beth Schwanke

"Considerations for Public Algorithmic Registries," May 2023 | Carl DiSalvo, Rosta Farzan, and Robert Gradeck

#### "Middle School Students' Experiences with Cyberbullying and Perspectives toward Prevention and Bystander Intervention in Schools," March

2023 | Candice Biernesser, Mary Ohmer, Lisa Nelson, Elizabeth Mann, Rosta Farzan, Beth Schwanke, and Ana Radovic

#### **Publications**, continued

#### "Community Survey Results: Public Algorithms in Allegheny

**County,"** January 2023 | Yu-Ru Lin, Beth Schwanke, Rosta Farzan, Bonnie Fan, Motahhare Eslami, Hong Shen, Sarah Fox, Scott R. Beach, and Rhaven Nelson

#### "Public AI and Algorithms Community Toolkit," 2023 |

Pittsburgh Task Force on Public Algorithms

## Selected Affiliate Scholar Research Presentations and Publications

Future Law Project, 2023 | Michael J. Madison

**"TextGenEd: Teaching with Text Generation Technologies,"** WAC Clearinghouse 2023 | Tim Laquintano, Carly Schnitzler, and

Annette Vee

#### "Al and Humanity: Shaping the Future," Utah Tech University Human-Tech Series, 2023 | Jen Keating

#### "Skill Complexity and the

**Future of Work,"** Employment, Labour and Social Affairs Department of the Organisation for Economic Co-operation and Development, 2023 | Morgan Frank

#### "Providing Normative Information Increases Intentions to Accept a COVID-19 Vaccine," Nature Communications, Jan. 9, 2023 |

Amin Rahimian

"The Kind of Solution a Smart City Is: Knowledge Commons and Postindustrial Pittsburgh," Cambridge University Press, February 2023 | Michael J. Madison

**"Connecting Higher Education to Workplace Activities and Earnings**," PLOS ONE 18.3: e0282323. March 15, 2023 | Chau, Hung et al.

#### "ESCAPE: Countering Systematic Errors from Machine's Blind Spots via Interactive Visual Analysis,"

ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization, March 2023 | Yongsu Ahn, Yu-Ru Lin, Panpan Xu, and Zeng Dai

"Identifying Macro and Micro Factors in Spreading Conspiratorial Content," Meta Research, March 2023 | Yu-Ru Lin and Amin Rahimian

"How Digital Disinformation Disrupts Social Learning in Democracies (but Is Difficult to Measure)," presented at a workshop hosted by the University of Oslo, featuring Michael Colaresi | April 27, 2023

"Transformative Potential of Al: Innovation, Impact, and Implications for the Future Workforce," Santander X (2023) | Estabon Moro and Morgan R. Frank

#### "Humanizing Big Data: Making Sense of How Youth of Color Experience Personalized Educational Technologies," in "Algorithmic Rights and Protections for Children,"

Ito, M., Cross, R., Dinakar, K., and Odgers, C. (Eds.), MIT Press, June 2023 | Veena Vasudevan et al.

"Against Output" [After Knapp and Michaels' Against Theory and Bender, et al's "Stochastic Parrots"]. Critical Inquiry Blog. Part of Again Theory: A Forum on Language, Meaning, and Intent in a Time of Stochastic Parrots, June 2023 | (Ed. Matt Kirschenbaum).

#### "Accessible Cybersecurity Education for Engineering

**Students,"** 2023 ASEE Annual Conference & Exposition, June 2023 | Mai Abdelhakim and Samuel Dickerson

#### "Art and the Science of

**Generative Al,"** Science 380.6650, June 15, 2023: 1110-11 | Epstein, Ziv, et al.

"Large Language Models Write Answers," Composition Studies 51.1, July 2023: 176-81 | Annette Vee

#### **"BASIC FTBALL and Computer**

**Programming for All,**" Digital Humanities Quarterly, Vol. 17., No. 2, July 2023 | Annette Vee

#### "TextGenEd: Teaching with Text Generation Technologies,"

Clearinghouse,oi: 10.37514/ TWR-J.2023.1.1.03. August 2023 | Eds. Annette Vee, Tim Laquintano, and Carly Schnitzler

#### "Allotaxonometry and Rank-Turbulence Divergence: A Universal Instrument for Comparing Complex Systems,"

EPJ Data Science 12.1 (2023): 37. | Peter Sheridan Dodds et al.

#### "Location Is a Major Barrier for Transferring U.S. Fossil Fuel Employment to Green Jobs,"

Nature Communications 14.1 (2023): 5711 | Junghyun Lim, Michaël Aklin, and Morgan R. Frank

#### "Using Edutainment and Motivational Interviewing to Address Misinformation in the Healthcare Setting,"

2023 International Conference on Communication in Healthcare, Oct. 22-25, 2023 | Hoffman B.L.\*, Shensa A., Mekbeb-Gillett S., Sidani J.E., Donovan A.K., Douaihy A., and Calhoun B.

#### "Brief for the Canada House of Commons Study on the Implications of Artificial Intelligence Technologies for the Canadian Labor Force: Generative Artificial Intelligence Shatters Models of Al and Labor," arXiv preprint arXiv:2311.03595. November 2023 | Morgan R. Frank

#### "How Hard Is Takeover in DPoS Blockchains? Understanding the Security of Coin-based Voting Governance," 30th

ACM Conference on Computer and Communications Security, November 2023 | Balaji Palanisamy et al.

#### "Chatting with Chat GPT,"

University of Western Cape, Cape Town, South Africa [date missing] | Jen Keating

#### "Chatting with Chat GPT,"

Network of Schools of Public Policy, Affairs, and Administration Annual Conference, Pittsburgh, Oct. 11-13, 2023 | Jen Keating

#### "Teaching Writing and Communications Before and After GPT," [missing location/date]

| Jen Keating

#### "Modeling the Resilience of Businesses Using Mobilitybased Dependency Networks,"

NETSCI 2023 | Takahiro Yabe, Bernardo Garcia Bulle Bueno, Morgan Frank, Alex Pentland, and Esteban Moro

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## Selected Programming and Events

This year saw events with the White House's Office of the National Cyber Director, former U.S. Secretary of Homeland Security Michael Chertoff, former U.S. Attorney General Eric Holder, U.S. Assistant Secretary of Commerce Alan Davidson, and more.

Office of the National Cyber Director Roundtable | Dec. 11, 2023

#### Preserving Democracy: Political Violence and Polarization,

hosted by The Dick Thornburgh Forum for Law and Public Policy and cohosted by the Graduate School of Public and International Affairs, Pitt Cyber, the Collaboratory Against Hate, the School of Law, and the David C. Frederick Honors College | Nov. 28, 2023

**4th Annual Data Analytics Conference**, hosted by LEAP, featuring Beth Schwanke | Nov. 11, 2023

**2023 Practitioners' Forum ASIL Midyear Meeting**, hosted by the American Society of International Law, Jones Day, and the University of Pittsburgh International Law Society, featuring Beth Schwanke | Nov. 9, 2023

#### Preserving Democracy: Protecting Voter Choice in the 2024 Election, in collaboration

with Keep Our Republic, sponsored by the Dick Thornburgh Forum under the Institute of Politics and cosponsored by Pitt Cyber and the School of Law | Nov. 8, 2023



#### **Studio C70: Election Day Edition**, hosted by the Committee of Seventy, featuring Beth Schwanke | Nov. 7, 2023

#### Dr. Antonio Byrd: Coding Black Functions for White Software Programs, hosted by the Composition Program, Department of English, Kenneth P. Dietrich

School of Arts and Sciences, and Pitt Cyber | Oct. 26, 2023

Ford Institute for Human Security Celebrating Its 20th Anniversary "Online Violence Against Women in Politics," cohosted by Pitt Cyber | Oct. 23, 2023

#### When Fact Checking Doesn't Work: Rebuilding Public Trust in Local News Sources,

hosted by the Pennsylvania News Media Association, Pittsburgh Media Partnership, Center for Media Innovation, and Point Park University, featuring Lara Putnam and Elise Silva | Oct. 20, 2023

## Battlefield Cyber: A Lunchtime Dialogue, hosted by Pitt Cyber and

Buchanan Ingersoll & Rooney PC | Oct. 18, 2023

#### Securing the Digital Future: What Does Cybersecurity Mean in the Age of Al? hosted by SEMAFOR, featuring

David Hickton | Oct. 6, 2023

#### Games4SocialImpact

cohosted by the University of Pittsburgh School of Computing and Information, Kenneth P. Dietrich School of Arts and Sciences and Pitt Cyber, among other organizations | Oct. 6, 2023

#### **Preserving Democracy: The Critical Role of the Media**, hosted by The Dick Thornburgh

Forum and Pitt Cyber | Oct. 5, 2023

#### National Cybersecurity Awareness Month Event, hosted by PNC, featuring David Hickton | Oct. 5, 2023

University of Pittsburgh Disinformation Lab Presents #FakeNews: Making Sense of Digital Media in the Era of Clickbait | Sept. 28, 2023

**Community Forum: Where Will We Get the News?** hosted by Spotlight PA, featuring Beth Schwanke| Sept. 21, 2023

#### Why Social Media Is So Uniquely Toxic to Our Mental

**Health**, hosted by the School of Computing and Information Department of Informatics and Networked Systems and Pitt Cyber | Sept. 21, 2023

A Diplomatic End to the War in Ukraine, hosted by the World Affairs Council | Sept. 19, 2023

#### Pitt Cyber Brown Bag Lunch: The View from NSF with School of Computing and Information Professor James Joshi | Sept. 13, 2023

Air Force Association CyberCamp, hosted by Pitt Cyber and Pitt Information Technology | June 19, 2023

US-based Indictments Against Nation-State Affiliated Hackers, hosted by The Azure Forum for Contemporary Security Strategy, featuring David Hickton | May 24, 2023

Cybersecurity and Cyber Threat Impacts on Today's Businesses, featuring David Hickton | May 12, 2023

Navigating Disinformation in Our Lives: Navigating Misinformation in News and Social Media, hosted by the Pitt Disinformation Lab and Sewickley Public Library | April 20, 2023

How Generative Al Predicts the Next Word, hosted by the Center for Governance and Markets and Pitt Cyber | April 19, 2023

**Election Threats: Past, Present, and Future**, hosted by Pitt Cyber and the Institute of Politics in partnership with The Azure Forum, CSIS, and Keep Our Republic | April 19, 2023

**Governing Smart Cities as Knowledge Commons**, hosted by Pitt Cyber, the School of Law, and the Center for Governance and Markets | April 12, 2023 Al Accountability Policies: A Discussion with Assistant Secretary Alan Davidson, hosted by Pitt Cyber | April 11, 2023

Repealing Closed Primaries: A Path to Better Government in Pennsylvania, Featuring David Thornburg, hosted by the Institute of Politics, The Dick Thornburgh Forum, and Pitt Cyber | April 10, 2023

Protecting Our Democracy and Securing Our Elections: A Conversation with the 82nd Attorney General of the United States Eric Holder and Pitt Cyber Founding Director David Hickton, hosted by Pitt Cyber and the Institute of Politics | April 4, 2023

Automating Early Warning: The Possibilities and Limits of Predicting Conflict, hosted by the Center for Governance and Markets and cohosted by Pitt Cyber and the Departments of English, Economics, Political Science, and Statistics, Kenneth P. Dietrich School of Arts and Sciences(?) | March 28, 2023

Navigating Disinformation in Our Lives: Stop the Spread: How to Recognize and React to Health Misinformation, hosted by the Pitt Disinformation Lab and Sewickley Public Library | March 22, 2023

Hacking4Humanity: The Problem of Online Hate, hosted by Carnegie Mellon University, Duquesne University, and Pitt Cyber | March 18, 2023

**The Ethics and Regulation of Generative AI**, hosted by Pitt Cyber and the Center for Governance and Markets | Feb. 27, 2023

Faculty Book Celebration: Our Data, Ourselves: A Personal Guide to Digital Privacy by Jacqueline D. Lipton, hosted by the School of Law and Pitt Cyber | Feb. 23, 2023 Navigating Disinformation in Our Lives: Election Disinformation: How to Identify It, What to Do About It, Why It Matters, hosted by the Pitt Disinformation Lab and Sewickley Public Library | Feb. 22, 2023

**Social Media and Threats to Democracy in Brazil**, hosted by the Center for Latin American Studies and Pitt Cyber | Feb. 14, 2023

**30th Annual McLean Lecture on World Law**, hosted by the Center for International Legal Education and Pitt Cyber | Feb. 7, 2023

BWSD Community Outreach Speaker Series: Baldwin-Whitehall Discussion: Disinformation and Our Community | Feb. 6, 2023

Predicting Well-being in the Real-World and Real-Time: Possibilities and Challenges, hosted by the Center for Governance and Markets and cohosted by Pitt Cyber | Jan. 31, 2023

**Protecting Yourself from Fraud and Scams**, hosted by the Pitt Disinformation Lab and Sewickley Public Library | Jan. 19, 2023

A Healthier Information Environment: The Alaska Public Health Information Response Team, hosted by the Pitt Disinformation Lab and the School of Public Health Department of Behavioral and Community Health Sciences | Jan. 18, 2023

## In the News

The Office of the National Cyber Director Visited Pitt to Discuss Workforce Development | PittWire | Dec. 12, 2023

Readout: Biden-Harris Administration National Cyber Workforce and Education Strategy Roadshow Stops at Pittsburgh Workforce Hub; Highlights Programs Recruiting Veterans and Women Reentering the Workforce | White House | Dec. 12, 2023

Alexa, Activate Cyber Resiliency by David Hickton | The Azure Forum | Dec. 7, 2023

In the Courtroom and Beyond: U.S. Attorneys Making a Difference | Keep Our Republic | Dec. 1, 2023

She Said, Al Said: How Gender Bias Creeps into Chatbots | MSN.com | Nov. 7, 2023

Hopewell Area School District Says Network Disruption Was Caused by Ransomware Attack | WTAE-TV | Oct. 24, 2023

Who Authors the Internet? Analyzing Gender Diversity in ChatGPT-3 Training Material | Tech Policy Press | Oct. 10, 2023

How to Spot Misinformation during Political Turmoil | WITF | Aug. 28, 2023

Why a Diplomat Became Pitt Cyber's New Policy Director | Technical.ly | Aug. 15, 2023

CyberCamp Introduces Students to Cybersecurity | July 29, 2023 Al Scam Artists Impersonate Familiar Voices to Scam the Rest of Us | KDKA-TV | July 12, 2023

**Decoding the Data** | Pitt Magazine | May 15, 2023

The Philadelphia Inquirer's Operations Continue to Be Disrupted by a Cyber Incident | The Philadelphia Inquirer | May 15, 2023

How Congress Is Tackling Disinformation from US Adversaries | The Hill | May 11,

2023

**Disrupting Ransomware** | EU Cyber Direct| March 30, 2023

Faculty, Cyber Law Experts Discuss Generative Al's Ethics, Regulations, Hidden Benefits | University Times | March 20, 2023

How to Fight Disinformation Online? Get Ahead of the Lie Before It Gets Out of Control | Technical.ly | March 8, 2023

How Is Ireland Fairing When It Comes to Cyber Security? | Newstalk Breakfast | Feb. 10, 2023

Should AI Chatbot Technology Be Regulated? | Government Matters | Feb. 4, 2023

Opening Doors: Progress in Criminal Justice Reform Efforts | h Magazine | Feb. 2, 2023

Ukraine Enters Uncharted Territory with Request to Investigate Russian Cyberattacks as War Crimes | The Hill | Jan. 30, 2023

Microsoft Invests Billions in ChatGPT Maker OpenAI | Digitaltrends | Jan. 30, 2023

## **Op-Eds**

#### Hickton: Finding an Ethical Digital Life amidst Terror

Pittsburgh Post-Gazette | David Hickton | Nov. 5, 2023

#### Who Authors the Internet? Analyzing Gender Diversity in ChatGPT-3 Training Material |

Tech Policy Press | Jessica Kuntz and Elise Silva | Oct. 9, 2023

Congress Must Seize the Opportunity to Double Down on Quantum Technology | The Hill | David Hickton and Robert J. Cunningham | Aug. 30, 2023

The US Must Come from Behind in the Global Race for Al Regulation | The Hill | David Hickton | Aug. 6, 2023

**Disrupting Ransomware** | EU Cyber Direct | David Hickton | March 30, 2023

#### We Must Treat Cyber Wars the Same as We Treat Conventional Military Encounters | The Hill | David Hickton | Feb. 26, 2023

State Must Focus on Preventative Measures to Stop Future Cyberattacks | The Irish Times | David Hickton | Feb. 2, 2023

ChatGPT Could Transform Society—and Its Risks Require Quick Regulation | The Hill | David Hickton | Jan. 19, 2023

## People

**David Hickton**, Founding Director; Professor, School of Law

Beth Schwanke, Executive Director

Jessica Kuntz, Policy Director

Sarah Barca, Administrative Director

**Yu-Ru Lin**, Research and Academic Director; Associate Professor, School of Computing and Information

**Michael Colares**i, Director, Pitt Disinformation Lab; Associate Vice Provost for Data and Science; William S. Dietrich II Professor of Political Science, Kenneth P. Dietrich School of Arts and Sciences

Elise Silva, Postdoctoral Associate

**Kate Ulreich**, Information Technology Consultant, with thanks to the generosity of Pitt Information Technology

## **Affiliate Scholars**

Pitt Cyber's Affiliate Scholars are faculty members drawn from across the University.

Kevin C. Abbott, Professor of Practice, School of Law

**Mai Abdelhakim**, Assistant Professor, Swanson School of Engineering

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

**Mostafa Bedewy**, Assistant Professor, Swanson School of Engineering

**Candice Biernesser**, Postdoctoral Scholar, School of Medicine

**Tinukwa Boulder**, Associate Professor of Practice and Associate Chair; Department of Teaching, Learning, and Leading; School of Education

**Ronald A. Brand**, 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

Judy L. Cameron, Professor of Psychiatry, Neuroscience, Obstetrics-Gynecology Reproductive Sciences, Clinical and Translational Science, and Behavioral and Community Health Sciences, Schools of Medicine and Public Health

**Bruce R. Childers**, Dean, School of Computing and Information

**Frances Corry**, Assistant 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

**Robert K. Cunningham**, Vice Chancellor for Research Infrastructure

**Stephanie Dangel**, Professor of Practice, School of Law

**Na Du**, Assistant Professor, School of Computing and Information

**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

**Michael Goodhart**, Professor, Department of Political Science, Dietrich School of Arts and Sciences

**Max Goplerud**, Assistant Professor, Department of Political Science, Dietrich School of Arts and Sciences

**Melinda Haas**, Assistant Professor, Graduate School of Public and International Affairs

**Joel M. Haight**, Associate Professor, Swanson School of Engineering

**David A. Harris**, John E. Murray Faculty Scholar and Professor, School of Law

**Daqing He**, Professor and Associate Chair, Department of Informatics and Networked Systems, School of Computing and Information

Harry Hochheiser, Associate Professor, School of Medicine

#### Affiliate Scholars, continued

**Beth Hoffman**, Assistant Professor, School of Public Health

**Jingtong Hu**, Assistant Professor, Swanson School of Engineering

**M. Zia Hydari**, Assistant Professor, Pitt Business

Ahmed Ibrahim, Teaching Assistant Professor, School of Computing and Information

Alex Jones, Professor, Swanson School of Engineering, and Associate Director, National Science Foundation Center for Space, High-performance, and Resilience Computing

**Kate Joranson**, Head Librarian, University Library System

**James Joshi**, Professor, School of Computing and Information

**Jennifer Keating**, Senior Lecturer and Writing in the Disciplines Specialist, William S. Dietrich II Institute for Writing Excellence, Dietrich School of Arts and Sciences

**Michael Kenney**, Associate Professor, Graduate School of Public and International Affairs

**Charles T. Kotuby Jr.**, Professor of Practice and Executive Director, Center for International Legal Education, School of Law

Maria Kovacs, Professor, School of Medicine

Adriana Kovashka, Assistant Professor, School of Computing and Information

**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, Department of History of Art and Architecture, Dietrich School of Arts and Sciences; Director, Visual Media Workshop; 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

**Sera Linardi**, Assistant Professor, Graduate School of Public and International Affairs

**Jacqueline Lipton**, Assistant Professor of Legal Writing, School of Law

**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, Dietrich School of Arts and Sciences

**Leona Mitchell**, Professor of Practice, School of Computing and Information, and Founding Director, Professional Institute at SCI

**Daniel Mossé**, Professor, School of Computing and Information

**Audrey J. Murrell**, Director, David Berg Center for Ethics and Leadership, and Associate Dean, Pitt Business

**Lisa S. Nelson**, Associate Professor, Graduate School of Public and International Affairs

Mary L. Ohmer, Associate Professor, School of Social Work

**Erica Owen**, Associate Professor and Associate Dean, Graduate School of Public and International Affairs

**Balaji Palanisamy**, Professor, School of Computing and Information

**Jennifer Petrie**, Associate Director, Strategic Initiatives, Pitt Business

**Lara Putnam**, Professor, Department of History, Dietrich School of Arts and Sciences

**Cassie F. Quigley**, Professor of Science Education and Chair, Department of Teaching, Learning, and Leading, School of Education

**Stephen Quigley**, Lecturer, Department of English, Dietrich School of Arts and Sciences

**Ana Radovic**, Assistant Professor 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**, Clinical Associate Professor of Business Administration, Pitt Business **Gayle Rogers**, Andrew W. Mellon Professor and Chair, Department of English, Dietrich School of Arts and Sciences

**Julia M. Santucci**, Senior Lecturer and Director, Graduate School of Public and International Affairs

**Jaime E. Sidani**, Assistant Professor, School of Public Health

Jonathan Silverstein, Visiting Professor and Chief Research Informatics Officer, Department of Biomedical Informatics, School of Medicine

**David Tipper**, Professor, School of Computing and Information

Albert C. To, Associate Professor and CNG Faculty Fellow; Director, Modeling and Optimization Simulation Tools for Additive Manufacturing Consortium; and Director, ANSYS Additive Manufacturing Research Laboratory, Swanson School of Engineering

**Veena Vasudevan**, Assistant Professor of Digital Media and Learning, School of Education

**Annette Vee**, Assistant Professor, Department of English, Dietrich School of Arts and Sciences

**Götz Veser**, Professor and Associate Director, Center for Energy, Swanson School of Engineering

**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

**Joseph T. Yun**, Artificial Intelligence and Innovation Architect, Pitt IT, and Research Professor, Swanson School of Engineering

**Bo Zeng**, Assistant Professor, Swanson School of Engineering

**Taieb Znati**, Professor and Chair, Department of Computer Science, School of Computing and Information

## Affiliate Practice Scholars

Pitt Cyber's affiliate practice scholars are drawn from across the industry and policy worlds.

**Diana Bishop**, Former Commander, Detachment 730, and Professor, Aerospace Studies

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

**Christopher A. Geary**, Senior Manager, Ernst & Young LLP

**Brian Geffert**, Global Chief Information Security Officer, KPMG International **Bob Gradeck**, Project Director, Western Pennsylvania Regional Data Center

**Caitriona Heinl**, Executive Director, The Azure Forum for Contemporary Security Strategy, and Adjunct Research Fellow, School of Politics and International Relations, University College Dublin

James T. Kitchen, Counsel, Jones Day

**John Kropf**, Corporate Privacy Executive, Northrop Grumman

Martin Lindner, Managing Principal Consultant, SecureWorks

**Keith Mularski**, Advisory Executive Director of Cybersecurity, Ernst & Young LLP

**Brian Murphy**, Managing Director, Logically.Al

**David Odom**, Chief Information Security Officer, Naval Nuclear Laboratory

**Harvey Rishikof**, Director of Cybersecurity, Applied Research Laboratory for Intelligence and Security, University of Maryland

James J. Straub Jr., Commander, Air Force ROTC Detachment 730

**Sean Sweeney**, Field CISO and Cloud Security Advisor Group Leader, Oracle

## Pitt Disinformation Lab Team

**Dimitriy Babichenko**, Clinical Associate Professor, School of Computing and Information

**Michael Colaresi**, Director, Pitt Disinformation Lab; Associate Vice Provost for Data Science; William S. Dietrich II Professor, Department of Political Science, Kenneth P. Dietrich School of Arts and Sciences; and Affiliate Scholar, Intelligent Systems Program

**Jessica Ghilani**, Associate Professor of Communication, University of Pittsburgh at Greensburg

**Sara Goodkind**, Associate Professor, School of Social Work, and Associate Professor, Department of Sociology and Gender, Sexuality, and Women's Studies Program, Dietrich School of Arts and Sciences

**Max Goplerud**, Assistant Professor, Department of Political Science, Dietrich School of Arts and Sciences

**Bob Gradeck**, Project Director, Western Pennsylvania Regional Data Center

**Beth Hoffman**, Assistant Professor, School of Public Health

Adriana Kovashka, Assistant Professor, School of Computing and Information

**Prashant Krishnamurthy**, Professor, School of Computing and Information

**Young Ji Lee**, Associate Professor, Schools of Nursing and Medicine

**Yu-Ru Lin**, Associate Professor, School of Computing and Information, and Research and Academic Director, Pitt Cyber **Sera Linardi**, Associate Professor, Graduate School of Public and International Affairs

**Michael Madison**, Professor and John E. Murray Faculty Scholar, School of Law

**Danielle R. Mehlman-Brightwell**, Assistant Professor of Public Policy and Communication and Director, Office of Community Outreach, University of Pittsburgh at Greensburg

**Rebekah Miller**, Research and Instruction Librarian, Health Sciences Library System

**Lara Putnam**, Lead, Civic Resilience Initiative, and Professor, Department of History, Dietrich School of Arts and Sciences

Amin Rahimian, Assistant Professor, Swanson School of Engineering

Beth Schwanke, Executive Director, Pitt Cyber

**Jeffrey Shook**, Associate Professor, School of Social Work

**Jaime Sidani**, Assistant Professor, School of Public Health

**Jonathan Woon**, Professor, Department of Political Science, Dietrich School of Arts and Sciences

**Vladimir Zadorozhny**, Professor, School of Computing, and Information

## Pitt Disinformation Lab Research Associates

**Bree Bang-Jensen**, Postdoctoral Research Associate, Department of Political Science, Dietrich School of Arts and Sciences

**Minsu Jang**, PhD Student, Department of Political Science, Dietrich School of Arts and Sciences

**Elizabeth Monk**, Research Specialist, University Center for Social and Urban Research

**Jacob Otto**, PhD Student, Department of Political Science, Dietrich School of Arts and Sciences

**Elise Silva**, Postdoctoral Associate, Pitt Cyber

## With Gratitude

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2516 Cathedral of Learning 4200 Fifth Avenue Pittsburgh, PA 15260

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