The Burnes Center for Social Change Northeastern University

The Burnes Center Quarterly Report

AUGUST 2024

The Burnes Center for Social Change at Northeastern University designs practical solutions to society's hardest problems. The Center is led by a growing team of accomplished and recognized changemakers focusing on strengthening democracy and improving governance, tackling climate change, advancing education outcomes, deepening labor and economic justice, and promoting better health.



Video credit: The Institute for Experiential AI. View on YouTube

Al for Impact co-ops serve residents with Al for good

How can we leverage AI to solve our most challenging public problems? Northeastern students are making government services work better for residents through the <u>Burnes Center for Social</u> <u>Change's AI for Impact Co-op</u> Program. The <u>AI for Impact Co-op Program</u> is a pioneering product-based learning program where student teams wield AI as a tool for transformative innovation, turning ideas into measurable impacts in collaboration with the communities they are serving and under the expert guidance of seasoned professionals. AI for Impact's mission is to deliver innovative projects that will improve people's lives and create a pipeline of AI-trained and mission-driven talent.

AI for Impact Northeastern co-op students are working on projects alongside Commonwealth of Massachusetts state agencies and community partners to improve the delivery of services and programs for residents using AI. Massachusetts Governor Maura Healey announced InnovateMA as part of her <u>administration's strategy</u> to position Massachusetts as a global leader in applied AI.



A has the potential to help us solve some of our most challenging public problems and serve the residents of Massachusetts more effectively and efficiently. Our state already has an advantage to be a global leader in applied AI because of our world class colleges and universities. I'm so impressed by the innovative ideas put forward

by these Northeastern students and the progress they have made over the past few months."

- Massachusetts Governor Maura Healey



AI for Impact co-op students present their final projects for Governor Maura Healey at the Massachusetts State house, June 2024.

Spring 2024 Cohort

The spring 2024 co-op cohort's projects included: improving customer service for the RIDE, the MBTA's door-to-door, shared-ride public transportation for people who have a disability; providing enrollment assistance for MassHealth customers; streamlining access to grant opportunities for farmers, businesses and communities; supporting MassDOT Highway design engineers; and creating a Generative AI Sandbox for state employees to securely explore and innovate with AI models.



Fall 2024 Cohort

13 new co-ops have started working on the next round of AI for Impact projects, supported by an appropriation from the State.



Leadora Kyin is a second-year master's student studying Product Development.



Temi Akinyoade is a fourthyear undergraduate student majoring in Computer Science and Linguistics.



Jake Ashkenase is a fourthyear undergraduate student studying data science.



undergraduate student pursuing a B.S. in Data Science with a minor in Mathematics.

Claudia Levi is a third-year



Deepikasai Mettu is a Master's student in Data Analytics Engineering.

Khushi Patel is a 4th year pursu-

ing a B.S. in Computer Science

and Philosophy with a mi-

nor in Political Science.



Rui Ge is an undergraduate student studying computer science with a concentration in Human-Centered Computing.



Suvir Ghai is a fifth-year student majoring in Economics and Corporate Innovation and Venture, with a minor in Music Industry.



Serena Green is a fifth-year undergraduate student pursuing a combined B.S. in Computer Science and Cognitive Psychology.



Sarah Klute is a third-year undergraduate student pursuing a B.S in Data Science and International Affairs with a specialized focus on the Middle East.



Prasoon Raj is currently a graduate student in Applied Machine Intelligence.



Rishabh Saxena is an undergraduate student pursuing a B.S. in Computer Science and Biology.



Shreya Thalvayapati is a fourth-year undergraduate student studying Data Science and Economics.



Governor Healey met with the Fall 2024 AI for Impact cohort during a July visit to Northeastern to tout the University's leadership in AI and highlight AI for Impact.

This semester's new projects include:

SMARTCHOICE

Increasing diversity and competitiveness and creating jobs by helping Massachusetts businesses navigate state procurement. –*Partner: Operational Services Division (OSD)*

BUILD FOR MASS

Assisting Massachusetts municipalities, environmental justice groups, rural towns, and historically-underserved communities to apply for state grant, grant-matching, and tax-break opportunities. –*Partner: Executive Office of Administration and Finance*

BUSINESS RESOURCES HUB

Helping Massachusetts residents grow their businesses and create jobs by making it easier to find state grants, incentives, and opportunities. –*Partner: Executive Office of Economic Development (EOED)*

A HEALTHIER DEMOCRACY AI

Helping low-income Massachusetts residents apply for \$80 billion dollars of unclaimed Federal Aid benefits in a healthcare setting. –*Partner: Link Health, through Professor Alister Martin's organization, <u>A Healthier Democracy</u>*

THE COURSE CATALOG

Develop an AI-driven platform that mines and aggregates publicly available program offerings and course catalog information from the Commonwealth's 24 community colleges and state universities. *–Partner: Massachusetts AI Collaboration for Higher Education (MACH)*



Spring 2025 Cohort

For the third cohort, the State of New Jersey will fund 8 additional co-ops, and funding from Google.org will allow the expansion of the program in New Jersey and California.

Through a grant from the Chan-Zuckerberg Initiative, AI for Impact will support a project in California.

MORE ABOUT AI FOR IMPACT

- Governor Healey Meets with Northeastern Students Working with Administration on AI Project Under InnovateMA Partnership, Governor's Office Press Release
- <u>New AI Tool Helps Find Grants for</u> Farmers, Northeastern Global News
- New AI Tool Helps MBTA Paratransit Program Serve Customers, Northeastern Global News
- Northeastern University Student Projects Improve Government With AI, Government Technology

- What's Next for AI in States? An AI Sandbox, Government Technology
- AI for Impact: Transforming Higher Education through Experiential AI Learning, by AI for Impact Professor David Fields
- Healey admin's AI blueprint for Massachusetts starts to take shape, Axios Boston
- Gov. Healey's AI Task Force Highlights Innovations at Northeastern, Northeastern Global News
- Download the AI for Impact One-Pager



Unlocking Literacy

The Burnes Center, alongside the Museum of Science and with the support of <u>the Chief of Teaching and Learning at Bos-</u> ton Public Schools, <u>Innovate Public Schools</u>, <u>The Learning</u> <u>Agency</u>, and <u>Citizens Foundation</u>, launched <u>Unlocking Literacy</u> in 2023 to engage the populations most impacted by inequities in learning to better understand why reading proficiently has proved so difficult and why change is so intractable.

Through conversations and collective action with students, caregivers, educators, and education scholars–nationally and in Boston–<u>Unlocking Literacy</u> is surfacing new ideas for how to address low literacy, and in particular, how new technologies, including artificial intelligence, might be part of the solution.

Unlocking Literacy's online engagement received over 38,000 responses from a wide range of stakeholders and community members about the top causes of literacy challenges. <u>Click</u> <u>here</u> and select the "Results" tab to review initial results.

NEXT STEPS

Creating Pathways for Literacy Teachers through Northeastern's Graduate School of Education

The Burnes Center has partnered with the Northeastern's Graduate School of Education (GSE) to support a pilot program between <u>The Carroll School</u>, an independent day school for elementary and middle school students in grades 1-9 who have been diagnosed with specific learning difficulties in reading and writing, and <u>Guild Elementary</u> <u>School, a Boston Public School in East Bos-</u> ton, to support professional licensure and development for literacy educators.

Burnes Center Faculty & Staff Updates



Top: Beth Noveck keynotes the 25th anniversary digital government conference and meets with senior leaders about AI.

Left: While in Taiwan, Beth met with Taipei Mayor Chiang Wan-an.





Meeting with President of the Legislative Yuan Kuo-Yu Han to discuss using AI to improve lawmaking.



Meeting with Johnny Chiang, Vice President of the Legislative Yuan to discuss the introduction of an AI chatbot to engage with the public on legislative measures and political reforms in Taiwan.



Burnes Center Senior Fellow and Professor Sofia Bosch Gomez wrapped up her spring semester graduate course "ARTG 5610: Design Systems," hosted at the Burnes Center's offices. Students learned to use systems thinking to analyze contemporary sociocultural, political, and technological issues, utilizing design tools to create innovative proposals for problem mitigation while considering ethical and social implications.

a series outcomes



Bill Cole Chief Technology Officer Executive Office of Technology Services and Security (EOTSS) ommonwealth of Massachusetts

2023 AWS IMAGIN SLG Champion



David Fields Professor of Practice and Senior Fellow

The Burnes Center for Social Change, Northeastern University



PANEL HOSTED BY

Director, US SLG/EDU East AWS Burnes Center Senior Fellow and Professor David Fields joined Bill Cole, Chief Technology Officer for the Massachusetts Executive Office of Technology Services and Security at the <u>Amazon Web Services (AWS) Imagine Conference</u> in Austin, Texas to discuss how Northeastern University AI for Impact co-op program and InnovateMA are improving how government serves its residents.





Senior Fellow and Professor Anita McGahan hosted a Strategy Session with Hunger to Health Collaboratory at the College of Professional Studies, supported by the Burnes Center team.



Burnes Center Research Fellow Dane Gambrell Research shared his <u>AI Problem-Solving Toolkit made in partnership</u> with Citizen Foundation at the <u>ACM</u>, Association for Computing Machinery Collective Intelligence Conference 2024, held on-campus at Northeastern.



Burnes Center Director Beth Simone Noveck offered the 2024 Ian P. Sharp lecture, "From Ballots to Bots: AI's Transformative role in Democratic Societies" at the Schwartz Reisman Institute at the University of Toronto.



Northeastern's AI for Impact co-op students worked on a project to streamline <u>Link Health</u>'s enrollment processes for LIHEAP, SNAP, and Lifeline using generative AI and computer vision. They focused on converting images of identification documents into text, enhancing data integration and accuracy in enrollments. The project was launched at an in-person event with the Boston Foundation in May,

helping to screen dozens of low-income Bostonians for eligibility and enrollment for these critical federal benefit programs. LinkHealth was founded and is led by Burnes Center Senior Fellow and Professor Dr. Alister Martin MD, MPP. Learn more about Alister's project with the Burnes Center, A Healthier Democracy AI.

Establishing the Nations First Al Implementation Program for Local Government

Led by Professor Neil Kleiman, the Burnes Center is the founder and lead organizer of a new collective of



research institutions including Cornell Tech, Emerson College, and New America focused on helping cities and states better understand and advance AI programming. The collective has initiated ambitious use cases in Boston and New York and has received an initial \$300,000 in funding from the Chan Zuckerberg Initiative and Kresge Foundation with active interest from a half dozen other grantmakers.

Engaging the Private Sector in Social Change

Professor Anita McGahan is launching a new project aimed at engaging the private sector in social change. **PI²: Private Innovation in the Public Interest** will explain why and how



leaders in both the private and public sectors can accomplish social change at scale. The project includes online workshops, a book, and curriculum for executives and governmental leaders who want to make change happen effectively and efficiently.

PROGRAM UPDATE

innovate(us)

A project of the Burnes Center, InnovateUS provides free online learning for public servants by public servants on data, digital, and innovation skills with an emphasis on evidence-based and equitable approaches.



Imagine a world where AI is your trusted assistant, helping you serve the public more effectively and efficiently. With generative AI, that world is becoming a reality. Like the Internet before it, AI is one of the most transformative technologies of our lifetime. At the same time, it's important to know the limitations of what this technology can and can't do.

InnovateUS launched a new course in July, <u>"Responsible</u> <u>AI for Public Professions: Using Generative AI at Work,</u>" a free, at-your-own-pace course designed by public sector professionals for public sector professionals.

Through hands-on demonstrations with a wide variety of the latest GenAI platforms, in two hours participants will learn how to:

- Draft and edit better documents, emails, and reports
- Analyze large amounts of information
 and quickly extract key insights

- Brainstorm to push your thinking in novel directions
- Communicate more effectively with residents and stakeholders
- and more.

Informed by <u>a multi-month engagement process with</u> <u>100+ AI leaders</u> led by the Burnes Center, experts universally agreed that training on the responsible use of AI to better serve constituents is important and urgent and should be widely available.

Structured for busy professionals at any skill level, this at-your-own-pace course offers flexible learning with closed captioning for all videos, downloadable transcripts for convenience, interactive exercises, worksheets for further practice, and resources for further learning.

> Interested in taking the course? Visit <u>course.innovate-us.org</u>

InnovateUS's State Partnerships in the News

N.J. Unveils AI Training, Tool for State Government Workers

California hopes to bolster AI preparedness with employee training for state workers

Governor Murphy Unveils AI Tool For State Employees and Training Course For Responsible Use

Rebooting Democracy in the Age of Al Fall 2024 – Winter 2025 Lecture Series

The Rebooting Democracy in the Age of AI lecture series will re-launch in September with a slate of global visionary designers, thought leaders, and changemakers to examine how AI technologies can reshape democratic participation and governance. The series is hosted by the Burnes Center

Rebooting Democracy in the Age of AI: on Using AI to Foster Legislative Transparency

with David Lesher of CalMatters

THURS, SEPT. 12, 2024 5 P.M ET | ZOOM, REGISTER

Digital Democracy creator David Lesher is spearheading the use of AI to create unprecedented legislative transparency and accountability in California. Learn how Digital Democracy is tracking every word spoken in collaboration with The GovLab and the Institute for Experiential AI.

Conversations are moderated by Burnes Center Director and Professor Beth Simone Noveck and participants are encouraged to engage in a live Q&A session.

in public hearings, every dollar donated to politicians, every bill introduced, every vote cast and more. We will talk about the impact of their work in California and what it will take to bring these lessons to other legislatures and parliaments to repair the lack of trust in representative democracy.

David Lesher is a veteran California journalist and state policy expertand co-founder of CalMatters, the home of Digital Democracy.

Book talk: OUR BIGGEST FIGHT: Reclaiming Liberty, Humanity, and Dignity in the Digital Age with Frank McCourt

THURS, SEPT. 26, 5 P.M ET | ZOOM, REGISTER

Join us as we talk with Frank McCourt to discuss his new book, <u>OUR BIGGEST FIGHT: Reclaiming Liberty, Human-</u> <u>ity, and Dignity in the Digital Age</u>. The internet, once a tool for connection and innovation, is now contributing to a youth mental health crisis, misinformation, and societal polarization. Its architecture has been distorted by Big Tech, which profits at the expense of our privacy and well-being. But it doesn't have to be this way. We will talk with Frank McCourt, about how to create a new Internet that strengthens democracy in the age of AI.

Frank McCourt is founder and executive chairman of Project Liberty, a far-reaching, \$500 million initiative to transform the internet through a new, equitable technology infrastructure and rebuild social media in a way that enables users to own and control their personal data. He is also owner of the French football club Olympique de Marseille and formerly owned the Los Angeles Dodgers.

Leveraging AI to Promote Fair Elections

with Jeanine Abrams McLean and Kate Gage

WEDNESDAY, OCT. 30, 5 P.M. ET | ZOOM, REGISTER

Dr. Jeanine Abrams McLean, President at <u>Fair Count</u>, and Kate Gage, Executive Director of the <u>Cooperative</u> <u>Impact Lab</u>, will discuss ways that AI is and can be used to strengthen free and fair elections. They will talk about their work to improve voter representation in the south and their experiments using AI in Mississippi to gather insights from canvassing, refine messaging and resource allocation to improve outreach to voters. We will discuss the potential and limitations of generative AI for progressive organizing and campaigns while fostering new ideas, teams, and community. **Dr. Jeanine Abrams McLean** is the President at **Fair Count**, a nonprofit, nonpartisan organization, founded by Stacey Abrams. The goal of Fair Count is to ensure that every person in Georgia and the nation is counted for a fair and accurate census and to build pathways to continued civic participation, including voting and redistricting.

Kate Gage is the Executive Director of the **Cooperative Impact Lab** which partners with non-profit and political organizations to test and adopt emerging technologies and approaches. She was a Founding Partner of <u>The</u> **Movement Cooperative (TMC)**, which supports over 600 political and civic engagement organizations with data and technology.

Smart City, Smarter Citizens

with Dr. San-Cheng Chang, Mayor of Taoyuan

THURSDAY, DEC. 5TH, 6 P.M. ET | ZOOM, REGISTER

Taoyuan, one of Taiwan's most populous cities with 2.2 million residents, consistently wins international awards for its innovative use of technology in city services. This "smart city" has implemented an AI-powered system to protect rivers and ecosystems, using real-time image analysis to monitor water quality. The city also employs sensors to optimize traffic flows and AI-enabled virtual replicas to engage residents in urban planning. Join us for this inspiring conversation with **Dr. San-Cheng (Simon) Chang**, Mayor of Taoyuan and former Taiwanese Premier, as he showcases how the city harnesses artificial intelligence to enhance governance and transform one of Asia's most innovative cities. Our discussion will explore Taoyuan's current smart infrastructure initiatives and future plans to foster vibrant communities and strengthen democracy through technology. Dr. Chang will share insights on how Taoyuan is paving the way for smarter, more responsive urban environments that benefit the city and its residents.

Dr. San-Cheng (Simon) Chang is the Mayor of Taoyuan City. He previously served as Premier of Taiwan. Prior to his career in public service, he was a professor of Civil Engineering at National Taiwan University and later Director of the country's National Center for High-Performance Computing. He also worked for Google as the Director of Google's hardware operations in Asia.

Al and the Future of Legislation: Innovation at the Library of Congress

with Natalie Buda Smith

THURS, JAN. 23, 5 P.M. ET | ZOOM, REGISTER

Join us as we talk with **Natalie Buda Smith** about work underway at the Library of Congress using AI to improve legislative operations and lawmaking practices. We will talk about how the Library is implementing machine learning technologies to extract legislative data, natural language to test summarization of legislative bills and build tools to assist legislative staff with visualizing changes in existing law through line edits, amendments, or newly drafted legislative proposals. We will talk about the Library's roadmap for AI innovation and how the Library of Congrtess ensures that implementation is done responsibly and with consideration for the authenticity and reliability of information.

Natalie Buda Smith is the Director of Digital Strategy in the Office of the Chief Information Officer at the Library, working to drive innovation through the use of emerging technologies (artificial intelligence, machine learning, and more) and approaches to improve the effectiveness, usability, accessibility, and enjoy-ability of the Library's digital products and services.

More from Reboot Democracy

The **<u>Reboot Democracy Blog</u>** explores the complex relationship between AI, democracy, and governance.

Review of Why Al Undermines Democracy and What to Do about It

The Al Echo Chamber: New Paper on Al and Epistemic Risk

Research Radar: Breaking Language Barriers: EU's iDEM Project Harnesses AI to Empower Marginalized Voices in Democracy Plus Ça Change: Is a Public Internet But a DreamSenate Working Group Proposes \$32 Billion to Spur Al Innovation

<u>Countering Election Subversion: 27</u> Strategies to Build a Stronger Democracy

Selected Publications

GOVERNMENT TECHNOLOGY | BETH SIMONE NOVECK

New Jersey Co-Creates Al Strategy With Public-Sector Staff

CENTER FOR EMERGING MARKETS | ANITA MCGAHAN

The Economic Case for "High Road" Labor Practices

JOURNAL OF MANAGEMENT STUDIES | ANITA MCGAHAN

Strategy Can No Longer Ignore Planetary Boundaries: A Call for Tackling Strategy's Ecological Fallacy

ARXIV | CO-AUTHORED BY DANE GAMBRELL

Using Artificial Intelligence to Accelerate Collective Intelligence: Policy Synth and Smarter Crowdsourcing

Selected Media Mentions

GOVERNMENT TECHNOLOGY | JULY 1, 2024

Northeastern University Student Projects Improve Government With Al

NORTHEASTERN GLOBAL NEWS | JUNE 28, 2024

New Al tool developed by Northeastern students connects farmers with environmental grants

NORTHEASTERN GLOBAL NEWS | JUNE 27, 2024

New AI Tool Helps MBTA Paratransit Program Serve Customers

featuring the AI for Impact program

JOHN BATTELLE'S SEARCH BLOG | JOHN BATTELLE

Can GenAl Change Big Companies?

JOHN BATTELLE'S SEARCH BLOG | JOHN BATTELLE

Ads, Ads Everywhere

THE GOVLAB | BETH SIMONE NOVECK AND SAM DEJOHN

Mexico's Unprecedented Effort to Rebuild Trust in its Justice System

POWER AT WORK | SETH HARRIS

<u>A Mid-Year Assessment of Workers'</u> Power in Collective Bargaining

POWER AT WORK | JOSEPH BRANT

How the Condé Union (Almost) Crashed the Met Gala

THE LEVER | JUNE 7, 2024

America's Biggest Tax Scam May Finally End

featuring Professor Beth Simone Noveck

REUTERS | MAY 24, 2024

Biden taps NLRB chair for new term, seeking to lock in Democratic majority

featuring Professor Seth Harris

BLOOMBERG | MAY 23, 2024

Biden Moves to Extend Labor Board Chief as He Courts Unions

featuring Professor Seth Harris

TIME MAGAZINE | MAY 20, 2024

Inside Audrey Tang's Plan to Align Technology with Democracy

featuring the Rebooting Democracy in the Age of AI lecture series

NBC NEWS | MAY 17, 2024

UAW loses Alabama union vote seen as bellwether for organizing autoworkers in the South

featuring Professor Seth Harris

FINTECH | MAY 16, 2024

Sifting through the labor market with Seth Harris, Senior Fellow at Burnes Center for Social Change

GOVERNMENT TECHNOLOGY | MAY 3, 2024

What's Next for Al in States? An Al Sandbox

Massachusetts Secretary of Technology, and Security Services Jason Synder discusses the AI for Impact program.

BLOOMBERG MARKETS | MAY 2, 2024

Seth Harris on April Jobs Report Preview

OFFICE OF SENATOR CORY BOOKER | APRIL 30, 2024

Booker, Rounds, Heinrich Announce Bipartisan Al Grand Challenges Act

featuring Professor Beth Simone Noveck

THE INSTITUTE FOR EXPERIENTIAL AI | APRIL 26, 2024

Beth Simone Noveck on the Untold Story of Al in Government

TOTAL INFORMATION AM | APRIL 24, 2024

Federal Trade Commission votes to ban non-compete agreements

featuring Professor Seth Harris

MSNBC | APRIL 20, 2024

The legacy of the Columbine shooting 25 years later

featuring Senior Fellow Jonathan Metzl

NEW YORK TIMES | APRIL 20, 2024

<u>The Most Important Thing I Teach My</u> <u>Students Isn't on the Syllabus</u>

featuring Senior Fellow Steve Kadish

WBUR | APRIL 18, 2024

College students disillusioned over political choices, lean toward Biden

featuring Research Assistant Jay Kemp

C-SPAN | APRIL 14, 2024

What We've Become - Living and Dying in a Country of Arms

Burnes Senior Fellow Jonathan Metzl is interviewed by Beth Simone Noveck

MEDICAL ECONOMICS | APRIL 9, 2024

Vot-ER: Physician ballots can improve the health of the body politic

featuring Alister Martin

