

Conversations about

— Data Science for Social Justice (DS4SJ) —

bringing community co-developed
social justice data projects into the classrooms

Sera Linardi, Emmaline Rial, Essifash Glah (CAASI @GSPIA)



University of
Pittsburgh

Center for
Analytical Approaches to Social Innovation
Graduate School of Public and International Affairs

caasi.pitt.edu

Pitt Data Science Task Force Recommendation (2021):

Challenges

1. Expertise are hidden within silos, inaccessible to many
2. Absence of visible scaffolding / framework to bring focal point
3. Educational content on responsibility, ethics and workflow lacking

Despite the widespread nature of data science at the University, the DSTF noted that many were not aware of the activities. More challenging, barriers to entry are impeding some disciplines from accessing even adjacent data science expertise: we anecdotally discussed and heard about significant interest but also sensed that many researchers and educators are unsure of how to engage with data and data methods, even though they want to do so. Faculty have ideas for ground-breaking uses and innovations with data and associated techniques, but the existence of domain silos and the absence of visible and legible scaffolding has been an obstacle to many of these reputation-enhancing projects. There is opportunity to leverage and share knowledge given the range of expertise and interest. In essence, many puzzle pieces exist throughout campus, and they should be put together into a comprehensive framework to bring about a focal point of data science. Subgraphs of related expertise need to be intentionally connected and supported between disciplines, illuminating new pathways of data science uses and breakthroughs. This observation reinforces the charge put forth by the Provost: we found that several capabilities exist that could be put together to make the sum of the parts greater than the whole.

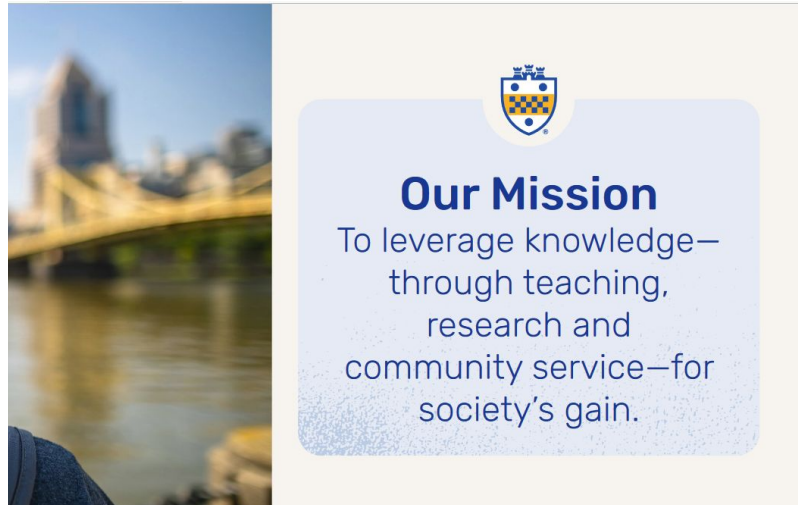
2.4 Human Resources will be Key to Success

Finally, not only do data capabilities exist on campus, but the interest of researchers, educators, and practitioners to forge a community, place, and organization to act with intention and coordination also exists to leverage and amplify data science. This level of interest could be powerful for recruitment, retention, and development of faculty, students, and staff. The framework recommended by the DSTF reflects this observation: [much of what we propose involves supporting and developing human resources, and gathering them into a “community of the eager”](#). One respondent to the survey of department chairs wrote, “within one school our bench is small and we would love opportunities to collaborate with other departments who have other skills.” From the DSTF’s own discussions and social networks, this seems to be a commonly held view. In fact, within the Data Science Task Force itself, several members expressed interest to start working on the recommendations right away, such as developing shared curricula or putting together a campus-wide lecture series. While there is grassroots interest, a mandate and

Proposed Solution:

Nurture a “**community of the eager**” around responsible, use-based data science.

Plan for Pitt (2021):



by nurturing a diverse, accessible “**community of the eager**” around responsible, use-based data science.

But what should we build this community around?

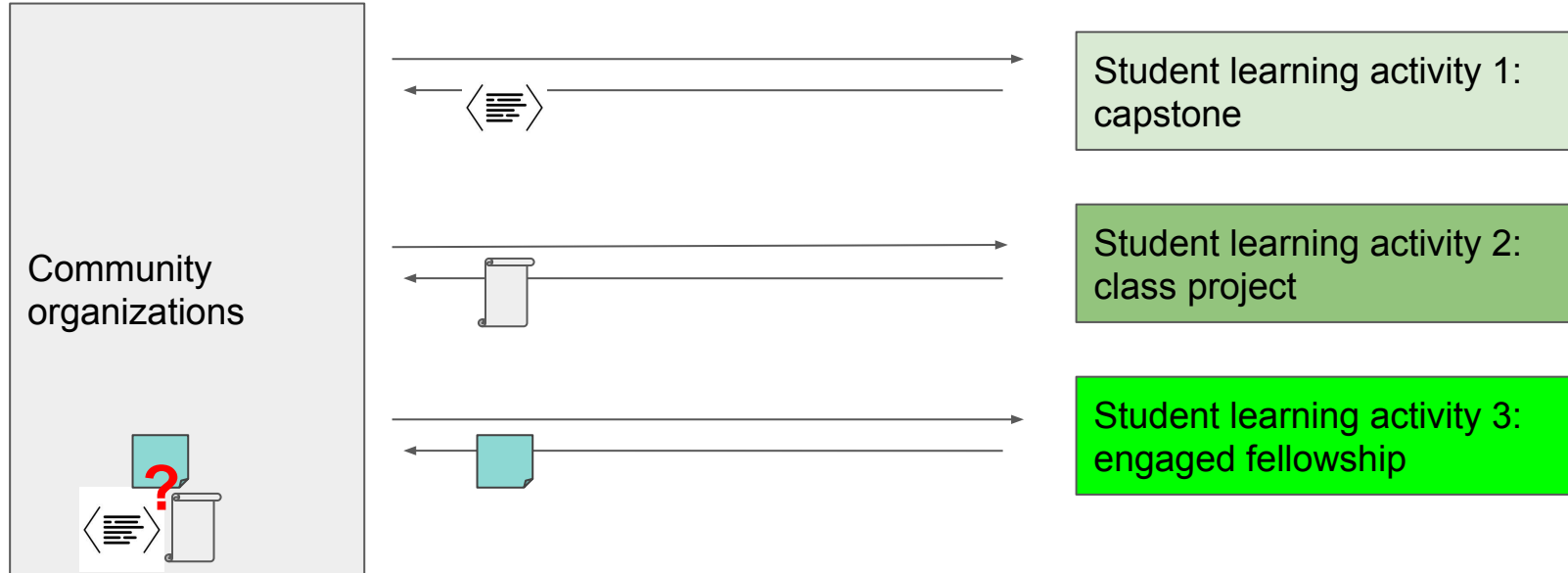
- Research?
- Community service?
- Student learning?

How CAASI connects community needs to student learning

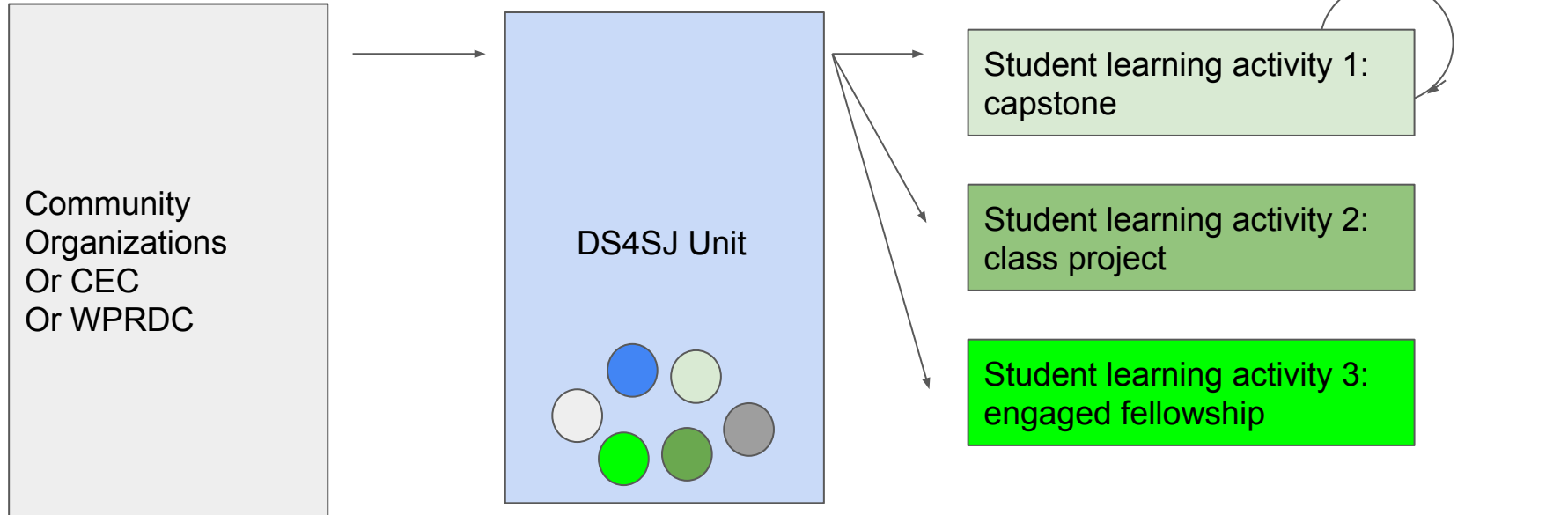
	Community needs	University community rel.	Experiential Learning	Faculty	Students
Incentive	Solve practical prob	Long term relationship	Connect students-comm.	Research / Teaching	Grades
Timeline	Open	Open	Semester	Semester	Semester
Discipline	Beyond disciplines	Not primarily student facing	Within a school	Single (e.g CS)	Single (e.g CS)
Disciplinary expertise	No	No	Some	Yes	
Context	Very important	A lot	More	Theoretical	Little

The DS4SJ Project

Current: has to go through this process every semester

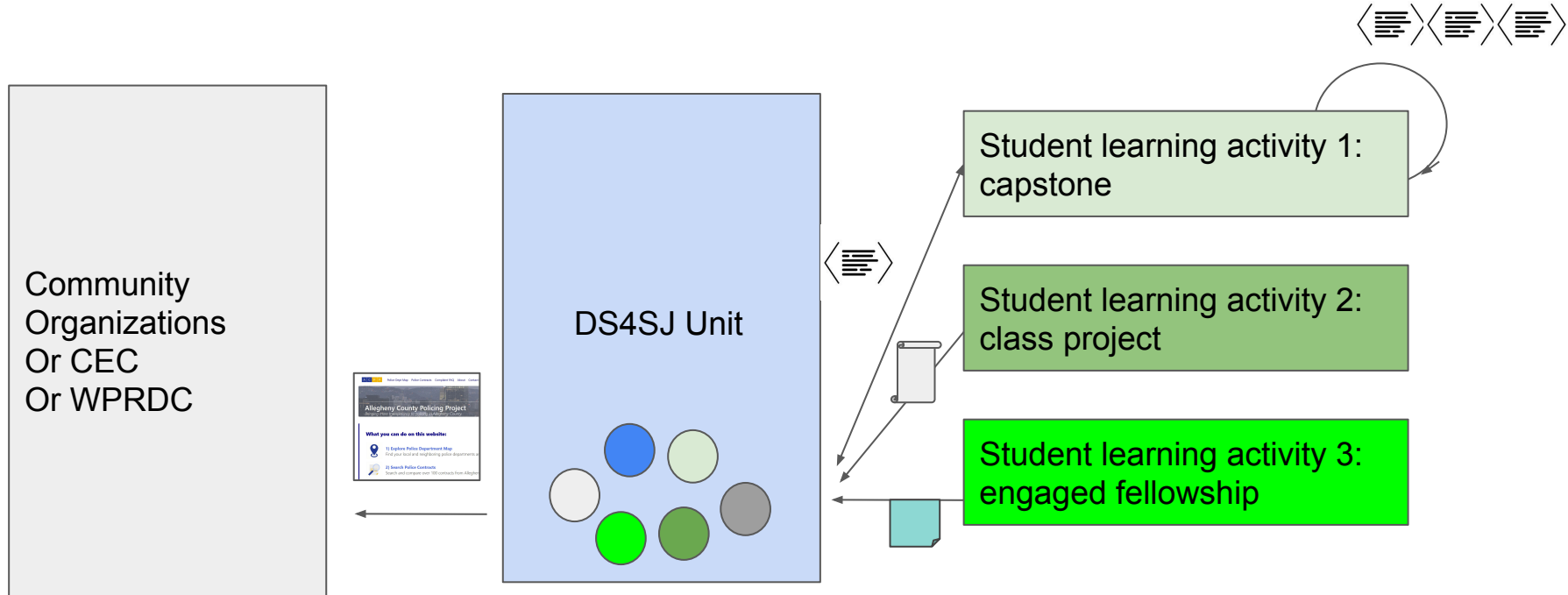


What it can be



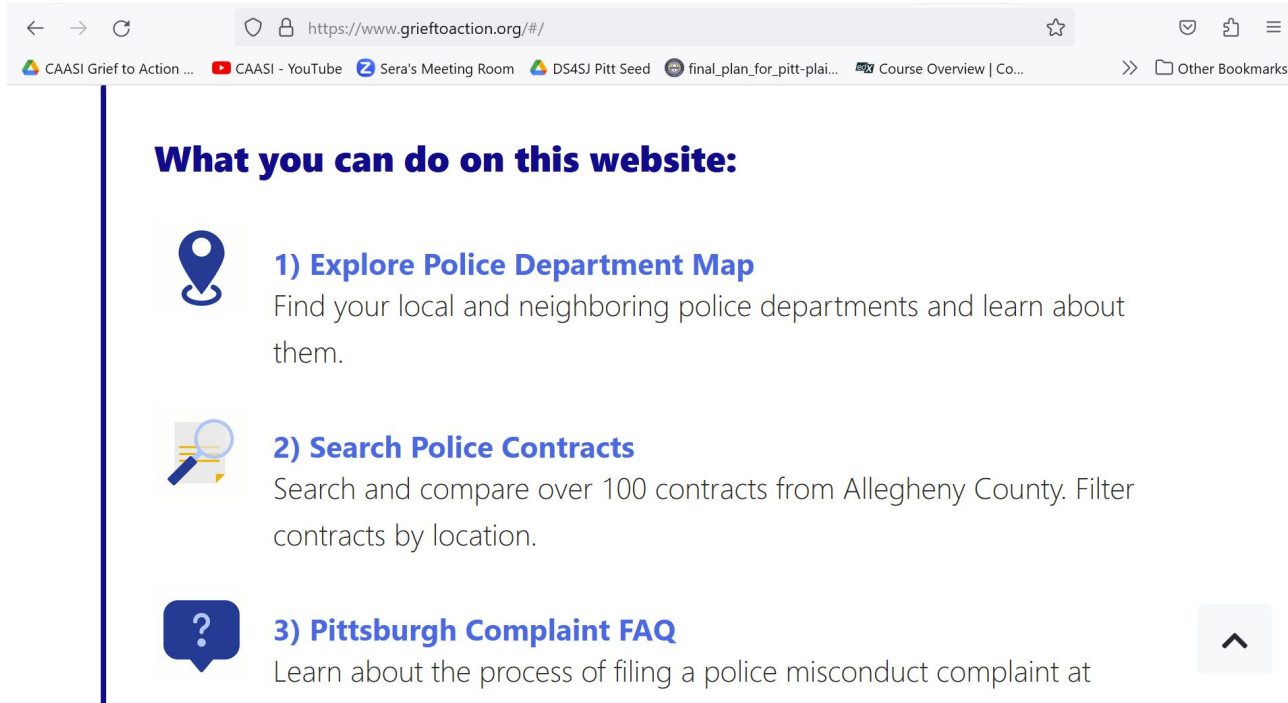
an integrated clinic of
multidisciplinary experiential
experience co-led with students.

What it can be






an integrated clinic of
multidisciplinary experiential
experience co-led with students.

Example: Allegheny County Policing Project (ACPP)



The screenshot shows a web browser window with the address bar displaying <https://www.grieftoaction.org/#/>. The browser's bookmark bar includes links to CAASI Grief to Action, CAASI - YouTube, Sera's Meeting Room, DS4SJ Pitt Seed, final_plan_for_pitt-plai..., and Course Overview | Co... A vertical blue line is positioned to the left of the main content area.

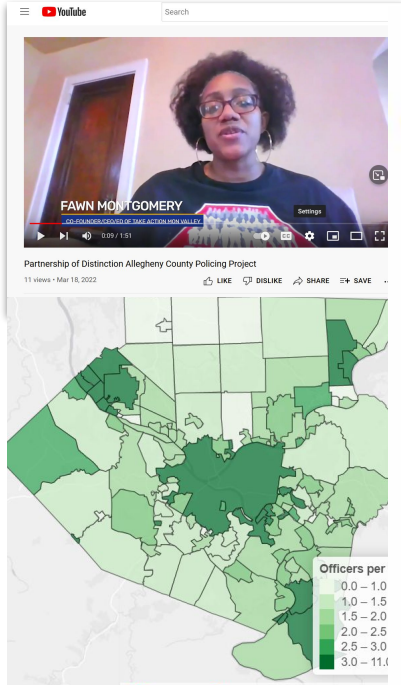
What you can do on this website:

-  **1) Explore Police Department Map**
Find your local and neighboring police departments and learn about them.
-  **2) Search Police Contracts**
Search and compare over 100 contracts from Allegheny County. Filter contracts by location.
-  **3) Pittsburgh Complaint FAQ**
Learn about the process of filing a police misconduct complaint at

A small grey button with an upward-pointing arrow is located at the bottom right of the content area.

[http:// grieftoaction.org](http://grieftoaction.org)

The issue: community requests & members' experiences



POLICE DISCIPLINE PROCEDURE

SECTION 19 – POLICE DISCIPLINE PROCEDURES

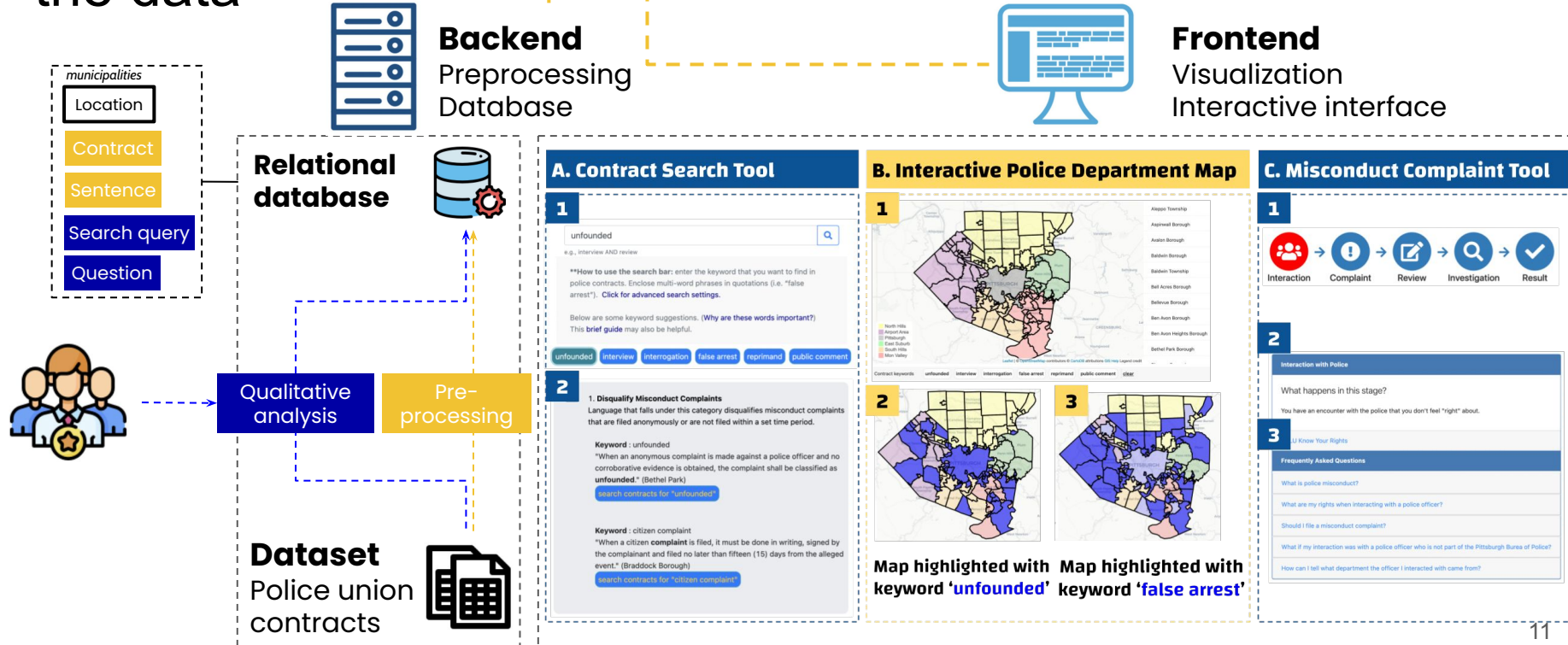
1. All disciplinary action will be initiated through the preparation and filing of a Disciplinary Action Report, copies of which shall be given to the Police Officer, and to the FOP
2. Within fourteen (14) calendar days after the Disciplinary Action Report goes through the chain of command and is signed by the Chief, there will be a meeting (referred to as the initial meeting) between the Police Officer and the FOP with the Director of Public Safety or his designate and the Chief or Assistant Chief. At this meeting, the City will describe the basis for the proposed discipline and describe in summary fashion the evidence upon which it is based. The Police Officer will be given an opportunity at this meeting to respond to the charges against him or her.
3. Within fourteen (14) calendar days after the initial meeting, the Director of Public Safety will decide whether or not to implement the proposed discipline, and notify the Police Officer and the FOP of his decision. If the discipline is to be implemented, suspensions with intent to discharge will be effective immediately. Discharges following such suspensions and all other disciplinary actions will be effective after the decision following the internal hearing described below, if one is requested. If an internal hearing is not requested within the specified time limits, the Director may implement the discipline immediately.



What we did:
translate ground-
level issues into
data strategy and
crowdsourced
data collection



What we built from the data



What students & community leaders get out of it

Potential Enhancement

How to use the search bar:
Enter the keyword that you want to find in police contracts.
Below are some keyword suggestions: [Allegheny County](#)
The [Allegheny County](#) may also be helpful.

Filter by Municipality: Sort by Matches: Results per Page:

91 Results found!

Avalon Borough

AGREEMENT BETWEEN THE BOROUGH OF AVALON AND THE AVALON POLICE ASSOCIATION EFFECTIVE DATES JANUARY 1, 2021 TO DECEMBER 31, 2023 TABLE OF CONTENTS ARTICLE 1 DECLARATION OF INTENT ARTICLE 2 RECOGNITION The Borough recognizes the Avalon Police Association as the employee organization to be the exclusive bargaining representative for all full-time permanent salaried employees and full-time police officers. The Borough and the Avalon Police Association may by a duly executed extension agreement provide for the extension of the term to a later expiration date.

Allegheny County District Attorney

Effective July 1, 2023 term the insurance shall be related to forty-five thousand dollars \$45,000 with double indemnity for accidental death on the identical terms as the additional line of duty benefit currently received by Allegheny County Police Officers. Vision Insurance Effective October 1, 1984 the County shall provide and pay one hundred percent 100% of all insurance costs for a vision care program providing the same benefits and levels thereof as are now provided under the Collective Bargaining Agreement with its Police Department employees.

137 more sentences

This allows for the results most matches to be at more sentences means many more matches the Allegheny County DA)

“Creation of socially impactful tools that I actually care about outside of my grade.”

“Real World Experience! Everything we did from building team to deploying the project was all vastly different from any kind of classroom experience”

“While I am not at all technologically inclined, I feel I may have found my calling through this multidisciplinary approach.”

“I talked about this in all my interviews.”

“Huge thanks to Grief To Action for listening to our call and responding. “ TAMV

Outputs: mentorship, presentations and publications

← → ↺ <https://dl.acm.org/doi/10.1145/3551624.3555298>

CAASI Grief to Action ... CAASI - YouTube Sera's Meeting Room DS4SJ Pitt Seed final_plan_for_pitt-plai... Course Overview | Co... Evaluating the

ACM DIGITAL LIBRARY Association for Computing Machinery

Journals Magazines Proceedings Books SIGs Conferences People Search ACM Digit

Browse Digital Library Collections

Home > Browse Publications > ACM Conferences > EAAMO '22 > Improving Citizen-initiated Police Reform Efforts through Interactive Design: A Case Study in Allegheny County

RESEARCH-ARTICLE FREE ACCESS



Improving Citizen-initiated Police Reform Efforts through Interactive Design: A Case Study in Allegheny County

Authors: Yongsu Ahn, Eliana Beigel, Noah Braun, Collin Griffin, Sera Linardi, Blair Mickles, Emmaline Rial [Authors Info & Claims](#)

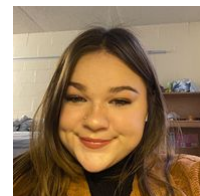
EAAMO '22: Equity and Access in Algorithms, Mechanisms, and Optimization • October 2022 • Article No.: 13 • Pages 1–10 • <https://doi.org/10.1145/3551624.3555298>

Published: 17 October 2022 [Publication History](#)

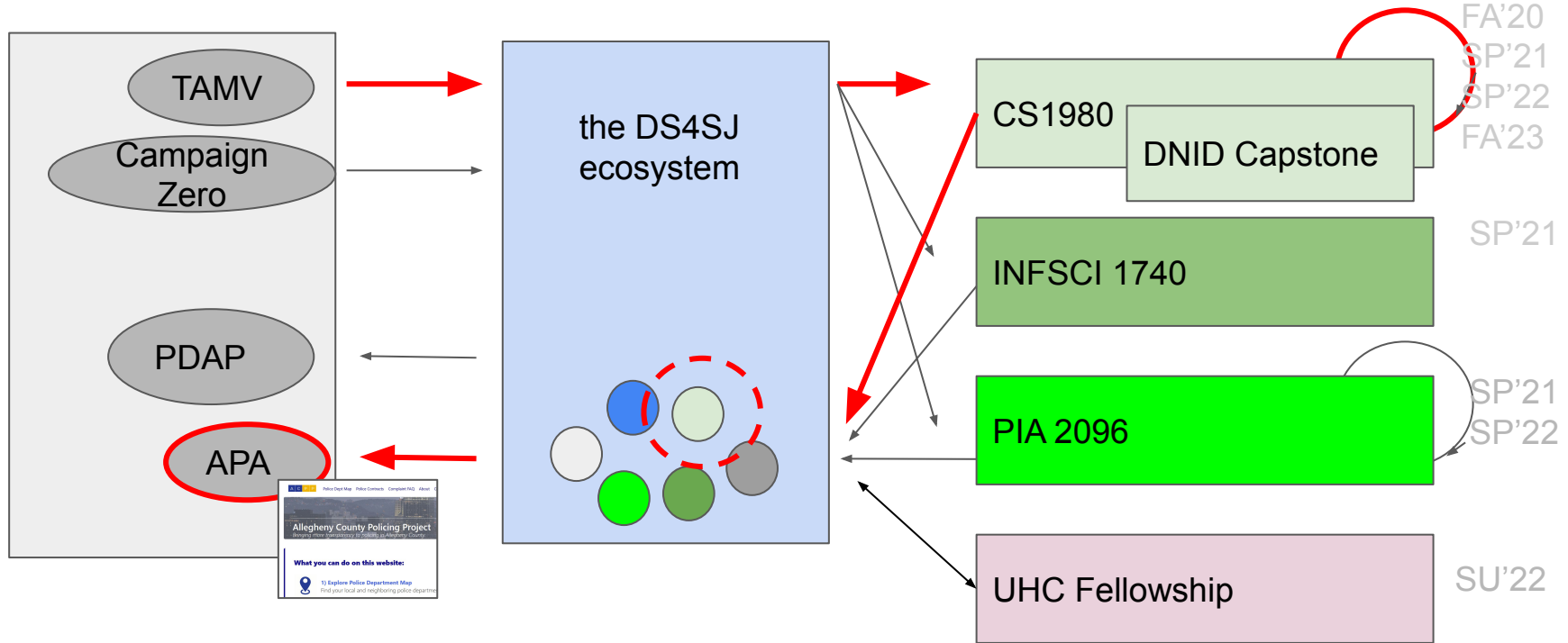
0 6



Feedback



Bringing community projects to the classroom



Conversations

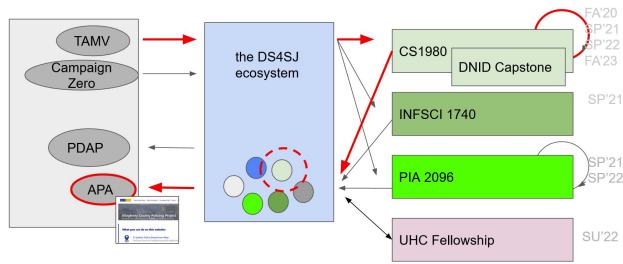
Introductions and roles

Expectations: students, student leaders, community, faculty

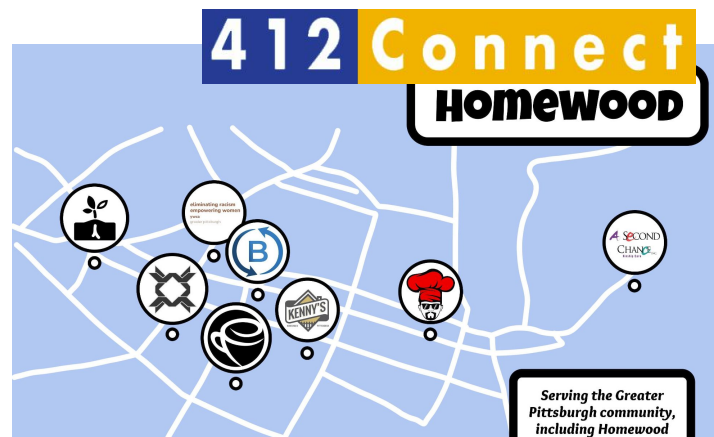
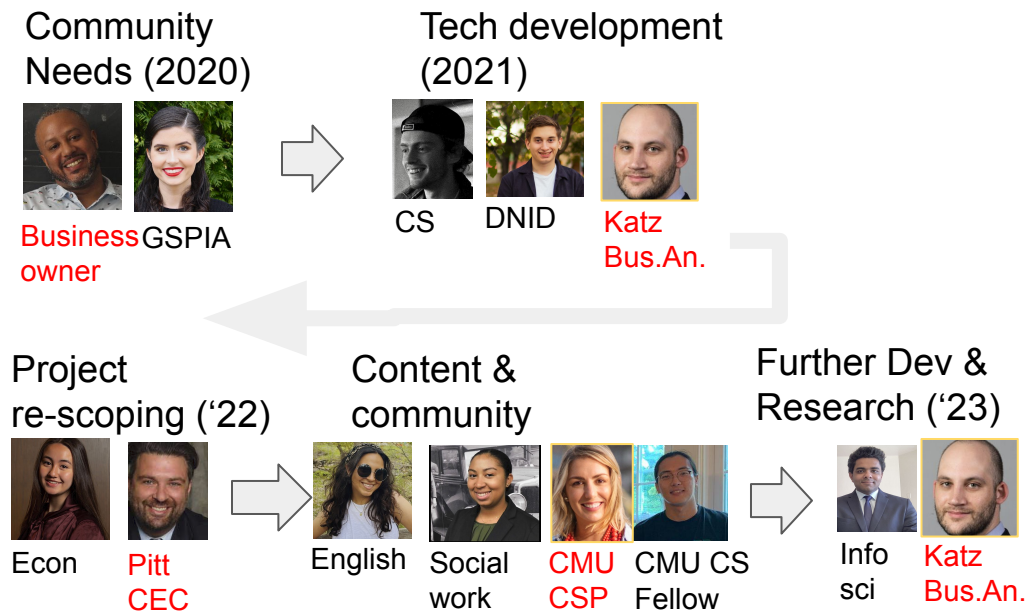
Scoping: what makes a good classroom project?

Timeline: how long do things take?

Bringing community projects to the classroom



Another example: 412Connect - Community Assets Scavenger Hunt



“CAASI projects are extremely unique. I interacted with students from different degree programs, faculty, staff, and local business owners...I would definitely recommend this project. Not only is it a huge learning experience for real-world practices in the field, but also the project itself is very rewarding seeing the work you put in being used to help others in your community.” Tyler Olin, Digital Narrative and Interactive Design, 2021



University of Pittsburgh

**Center for
Analytical Approaches to Social Innovation**
Graduate School of Public and International Affairs

Follow CAASI on Social Media: @caasipitt
caasi.pitt.edu

- [Twitter](#)
- [Instagram](#)
- [YouTube](#)

- [LinkedIn](#)
- [Linktree](#)

Our theory of change:

1. We don't directly act on issues of social justice; we **offer resources to grassroots orgs** to build capacity around data to pursue their own theory of change
2. We respond to community requests holistically; we aggregate resources from across campus to go **beyond disciplinary boundaries** to provide what the orgs need.
3. We **raise awareness** by offering space for students to grapple with questions raised by these orgs within their classwork .
4. We offer opportunity for students to hone **advanced leadership skills** through experiential learning and coordination of experiential learning opportunities.

SP'23 Cohort seek to answer:

What are procedures and criteria to:

- a.Scope and co-design data projects with the community?
- b.Recruit and incentivize faculty and students for the DS4SJ unit?
- c.Involve a course in the DS4SJ initiative?
- d.Match student capstone teams?
- e. Train, supervise and incentivize student leaders (students and volunteers)?