Conversations about

Data Science for Social Justice (DS4SJ)

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

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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

**Proposed Solution:**

Nurture a "community of the eager" around responsible, use-based data science.
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

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

The DS4SJ Project
Current: has to go through this process every semester

Student learning activity 1: capstone
Student learning activity 2: class project
Student learning activity 3: engaged fellowship

Community organizations
What it can be

- Community Organizations
  - Or CEC
  - Or WPRDC

- DS4SJ Unit

- Student learning activity 1: capstone
- Student learning activity 2: class project
- Student learning activity 3: engaged fellowship

an integrated clinic of multidisciplinary experiential experience co-led with students.
What it can be

Community Organizations
Or CEC
Or WPRDC

DS4SJ Unit

Student learning activity 1: capstone

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an integrated clinic of multidisciplinary experiential experience co-led with students.
Example: Allegheny County Policing Project (ACPP)

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

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 designee 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.

- **Problem**
  - Lack of systematic understanding of legal provisions related to police accountability
  - Hyper-fragmentation of local police department
  - Difficulty navigating the misconduct complaint process

- **Data Collection**
  - ~100 police union contracts across municipalities
  - Metadata about the status of local policing
  - Misconduct complaint process
What we built from the data

1. Organize disparate information into a relational database
2. Provide entry points for better browsing and understanding of police union contracts
3. Provide a geospatial overview of police unions
4. Provide an interactive flowchart to bring transparency to the process of filing a complaint

Requirements

1. Relational database
2. Preprocessing
3. Visualization
4. Interactive interface

Backend

Dataset
Police union contracts

Preprocessing

Qualitative analysis

Search query

Question

Location

municipalities

Contract

Sentence

A. Contract Search Tool

1. Unfounded
   - Keyword: Unfounded
     - When an anonymous complaint is filed, a police officer and no corroborative evidence is obtained, the complaint shall be classified as unfounded.

2. Disqualify Misconduct Complaints
   - When a misconduct complaint is filed, it must be done in writing, signed by the complainant and filed no later than fifteen (15) days from the alleged event.

B. Interactive Police Department Map

Map highlighted with keyword ‘unfounded’

Map highlighted with keyword ‘false arrest’

C. Misconduct Complaint Tool

1. Interaction
2. Complaint
3. Review
4. Investigation
5. Result

What happens in this stage?

- Have you had an encounter with the police that you don’t feel right about?

Transparency Standards:

- What is the policy?
- What are my rights when interacting with a police officer?
- Should I file a misconduct complaint?
- Why did my interaction with a police officer violate the Philadelphia Bureau of Police Code of Conduct?
- How can I tell what department the officer I encountered was from?
What students & community leaders get out of it

“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
Bringing community projects to the classroom

TAMV
Campaign Zero
PDAP
APA

the DS4SJ ecosystem

CS1980
DNID Capstone
INFSCI 1740
PIA 2096
UHC Fellowship

FA'20
SP'21
SP'22
FA'23
SP'21
SP'22
SU'22
Conversations

Introductions and roles
Expectations: students, student leaders, community, faculty
Scoping: what makes a good classroom project?
Timeline: how long do things take?
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
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?

ee. Train, supervise and incentivize student leaders (students and volunteers)?