

# Civic Engagement Symposium Project Abstracts

## April 25, 2024

### Apache Kafka

Apache Kafka is a software open-source project for an informational system that helps digital systems communicate with each other. It helps capture data from multiple event sources, store it, and let it be retrieved in real-time. Our team contributes to its development by updating features, writing tests, and fixing issues. (Dung Ha '24, Tap Dang '25)

### CCLA's Days of Service

The Center for Civic Learning & Action (CCLA) facilitates student engagement in community outreach within Carlisle. Through Day of Service programs, students gain leadership experience while aiding local community partners. Student volunteers' reflections on Days of Service underscore the transformative impact of these experiences through high participant satisfaction and increased civic responsibility. (Fiona Tierney '24)

### Empowering Carlisle: Tracing the Legacy and Impact of the United Way Community Impact Fund

An investigation into the United Way's community impact fund and the shifting narrative of donations. Today, a lot of people feel more comfortable knowing where their money is going; however, it is vitally important for the continuance of smaller, underfunded nonprofits. (Aidan George '27)

### Enhancing Music Education Through Sugar Labs' Music Blocks

Through Sugar Labs' music education tool Music Blocks, we address the education gap by enhancing their platform through bug fixes, lesson plans, and application improvements. Our contributions empower the education community, providing valuable tools for teachers and learners alike, fostering a culture of musical creativity, collaboration, and accessibility in learning. (Sai Alturi '24, Melantha Chen '24, Sophia Elguera '24, Ethan Hart '24, Myra Hasan '24, Belgin Koc '24)

### **Hugging Face**

Huggingface Transformers is an open-source platform that provides tools for natural language processing, computer vision, and other deep learning tasks. By helping resolve community-sourced issues and bettering user-oriented guides, we have helped improve user learning experience and accessibility in various AI-related tasks.

(Tanner Scott '24, Aaron Stern '25, Evan Wong '24)

### **Juvenile Justice: Mapping Racial/Ethnic Disparities in Juvenile Probation Referrals**

This research aims to analyze the demographic data of juveniles referred to Cumberland County Juvenile Probation, comparing it with county and municipal demographics. Using data from the Juvenile Court Judges' Commission and other sources, the project aims to visually map potential racial/ethnic disparities to facilitate discussions with appropriate authorities.

(Mai Nguyen '24, Darcely Peña '25)

### **MermaidJS**

MermaidJS is a JavaScript library for generating diagrams and flowcharts from text-based descriptions. It is used to create diagrams for documentation, presentations, and other purposes. We aimed to pursue shared community goal of increasing development productivity with simple diagrams. Our contribution includes feature implementations, bug fixes, and documentation updates.

(Christian Gonzalez '24, Michael Krause '24, Andrew Lai '24, Trang Vu '24, Marcel Lee '24)

### **Reclaiming History: The Transformation of Carlisle Memorial Park from Lincoln Cemetery and the Erasure of Black Civil War Veterans**

Carlisle Memorial Park, once Lincoln Cemetery, embodies the erasure of Black Civil War soldiers' contributions. Neglect and discrimination led to its deterioration. This research presentation highlights the deliberate erasure, challenges dominant narratives, and emphasizes the importance of preserving marginalized communities' legacies within historical memory. (Yeismarie Rivera-Olivo '26)

### **Sadler Health Center Overview: Population Health and PCMH Approach**

This study examines patient care models at Sadler Health Center (SHC) in Carlisle, Pennsylvania, focusing on Population Health, Patient-Centered Medical Home (PCMH), and Team-Based Care models. Through qualitative interviews with SHC staff, we explore the integration and impact of these models on various facets of care delivery. (Magdalena Lazraj '24, Clair Shearer '24, Davianna Bartelli '24, Kate Dombroski '24, Izzy Ferrazza '24, Emma Agro '24, Maritryny Galvez-Ceron '24)

### **Service Trips & Community**

CCLA provides students with the opportunity to travel and participate in service trips during breaks. This year I was able to attend the Sea Island Habitat for Humanity trip. During the trip I witnessed how service trips create and support communities, which all students should learn from and take part in. (Maya Reichenbach '27)

### **Strengthening Non-Profit Impact through Strategic Partnerships**

Local non-profits in Carlisle work to address the community needs. These non-profits have shared goals of serving and strengthening the community by offering programs and a safe environment with a strong support network. Community partnerships benefit all stakeholders and are imperative to strengthening the impact non-profits have on the community. (Elena Mazurek '27)

### **Summary of Automobile Incidents Involving Cyclists and Pedestrians in Pennsylvania (2017-2021)**

This study is part of my data analytics internship at the Center for Civic Learning & Action (CCLA) in Fall 2023. In this project, my primary objective is to merge and analyze Pennsylvania Crash Data and American Community Survey (ACS) Data from 2017 to 2021. My goal is to provide a comprehensive summary of crash-related statistics in Pennsylvania, with a particular emphasis on incidents involving cyclists and pedestrians. (Margaret Nguyen '25)

### **Uncovering the Health Ramifications of Open Stoves on Women in Guatemala**

Open stoves in Guatemala pose severe health risks, especially for women. Prolonged exposure to emitted pollutants increases respiratory disease risks like bronchitis, pneumonia, and cancer. Women, spending hours cooking, face heightened health risks, impacting both their well-being and that of their children, jeopardizing future generations' health. (Sarah Do '24)

### **Walled Off: Disproportionate Food Insecurity among Immigrant Children**

Immigrant children experience disproportionate levels of food insecurity. We research findings that identify and examine some barriers to access and explore how CASA of Cumberland County and Project SHARE work to combat them. Then, looking at the work being done, we identify areas to which more attention would benefit. (Avery Lonzer '27, Reeti Rawal '27)