


Sidewalk Labs Data Exploration

Zone Heatmap	Day Heatmap	Paths And Events	Weekday Counts	Maintenance Times
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Tuesday February 19, 2019



Area

Streetscape

Object Type

Pedestrian

Metric

Object Count

Weekday

All

☐ Show Events Only

☒ Use Date Slider

Date

2019/02/20

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☐ Show Advanced Options

Privacy philosophy

Contemporary, the rapid development of technology has driven people's concern about privacy. It is possible to identify people based on little information. We understand doing data analysis might create risk for people's privacy, and we try to avoid this situation and try our best to protect people's privacy .

Our webpage will be presented to numina workers for solving a variety of problems that involves user data. We, as the developer of the webpage, have to keep nobody's privacy gets offended. We take account of all the steps we used to build the webpage to prevent any people from trying to get any personally identifiable information. This privacy policy involves the data we used and how we use the data.

Information we used: All the data we used are from Numina, which is a team mission to empower cities with data to become more responsive and more equitable. Numina is the only computer vision sensor solution purpose-built for streets and designed from Day 1 to provide Intelligence without Surveillance. The data we used are collected by three numina sensors and processed by the Numina team to remove all the personal identification information. We used the following data for our website:

Count: Count records the number of people that pass by a specific area for a given time, which does not involve any information that directly points to any people. Sample image: Three images collected by Numina showing the area each sensor collected data from. All the three images do not include any people's face or object's identification number (Includes vehicle number, driver's license number) Heatmap: A heatmap is an array of values representing the spatial distribution of activity levels. The heatmap data only includes a number for each pixel of each sensor's sample image to indicate the activity level for that pixel in a given time interval. The heatmap data does not involve any personal information. Dwell time: Records how long does a detected object stay in a selected area in a given time interval. This data involves the mean and quantiles of dwell time in a given time interval and a selected area in one of the three sample images and does not involve any person or vehicle's identifiable information. Events: The event data is from pages affiliated with Sidewalk Labs Toronto, including their official website and Facebook page. When we use events, we do not identify the participants of those events. Instead, we only count them in our data.

How we use the data:

We never use the given data to interpret personal information.

For the Path and Event section, we use GraphQL to directly query count, heatmap and dwell time data from the Numina database. We restrict the area of a query to prevent an injection attack. We display the dwell time and count data of each selected area directly to users by using a line graph. And we only display heatmap data directly on the sample image. All of our analysis does not involve any process of trying to guess any pedestrian or vehicle identity.

For the maintenance schedule, we only use count information about users. We try to protect people's privacy and make sure others can't identify personal information.

When we use our zone heatmaps, they do not show the image of any personal information and only show data that is not traceable to any person.