

AI for Urban
Sustainability Final
Project Presentation

Resting in Public Space:

Automatic Detection
and Mapping of Seating

Background

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Recharging in public space

When you're out and about, sometimes you just need a place to rest. It's important for accessibility of public spaces, too.

Information gap

Finding a good place to sit in public can be hard. There are no maps you can check (yet).

Diverse definitions

Seating can look very different visually—from classic park benches to bus shelters—requiring a flexible and scalable approach.

Approach

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Delineate

- Area of interest: Old City
- Targets of interest: Seating in public spaces

Train

- Datasource: Google Street View images selected from every block
- Model: Mask R-CNN trained with hand-labeled Phila data

Label & Show

- Mark road segments where at least one place to sit was found with 90%+ probability

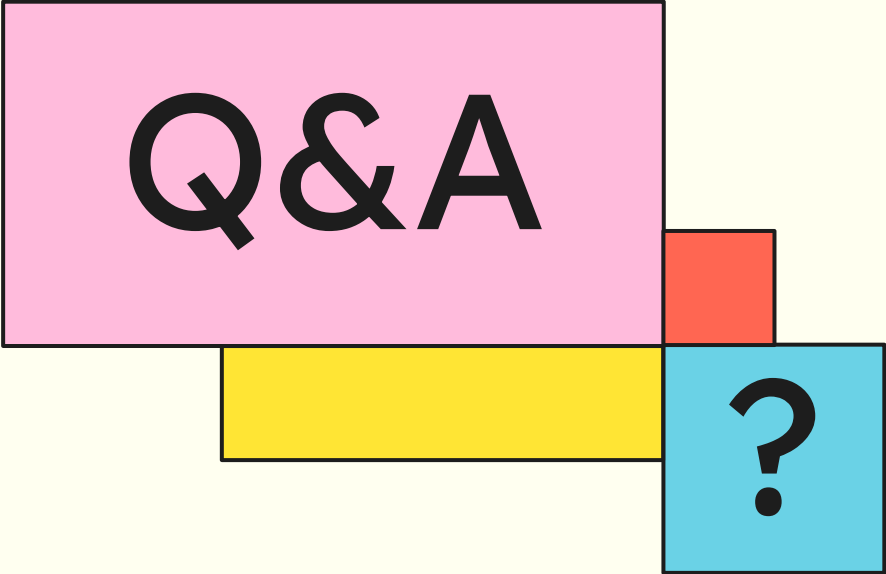
Map

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Example in progress

- Fine-tuning level of spatial aggregation
- Potential threshold changes





Q&A

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