Crowdsourcing Urban Bicycle Level of Service Measures

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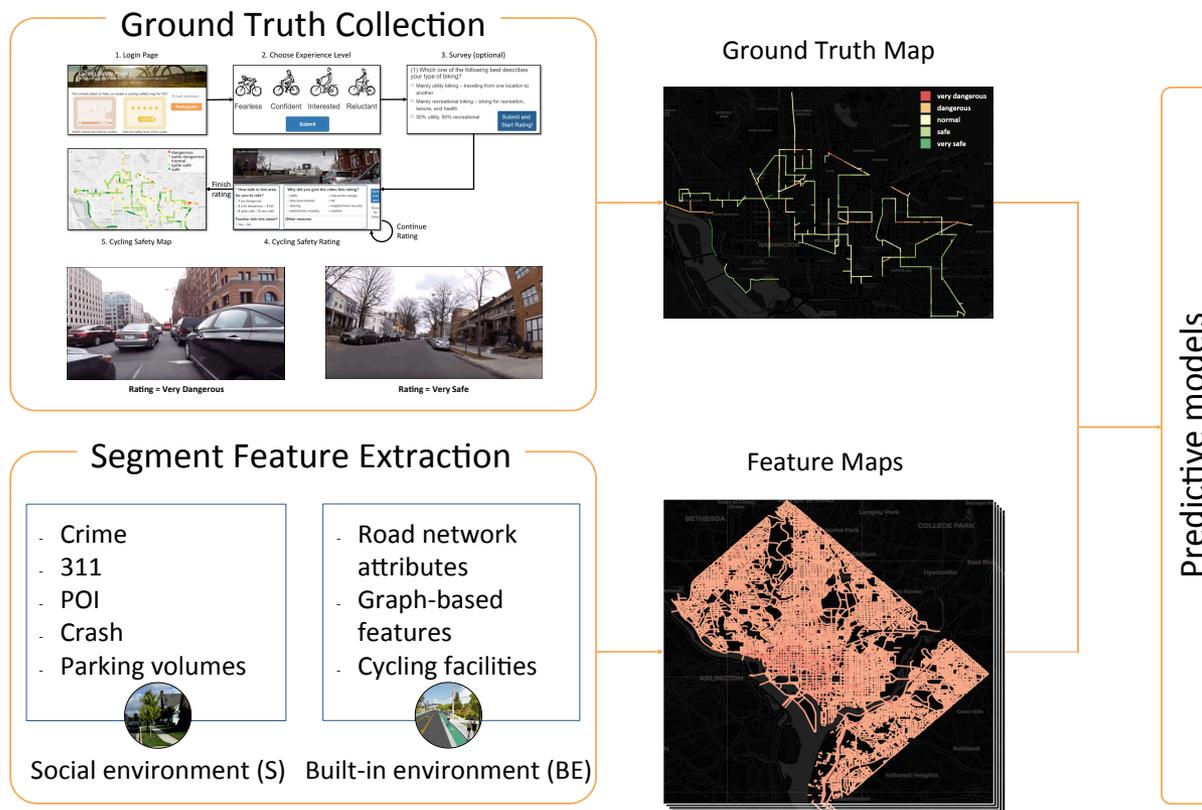
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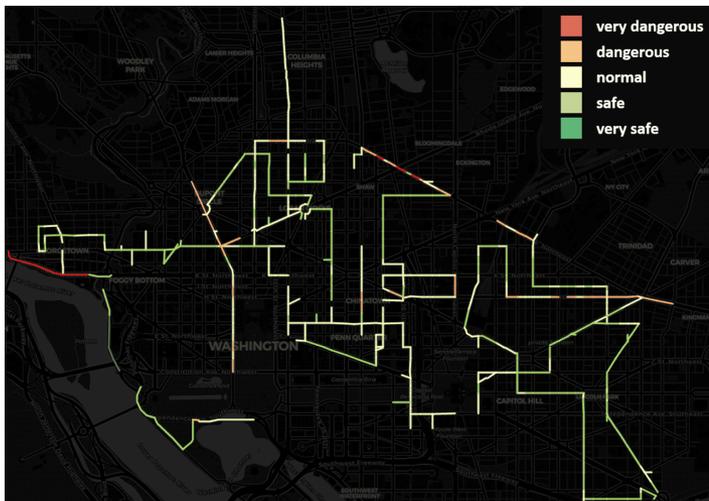Poster Time and Location: Session 2, Friday 1-2:15pm, #250

Description

- Cycling safety is key to increase ridership in cities. Current approaches to model cycling safety require extensive sensor data only available for certain streets

- Predict perceived cycling safety using social and built-in environment features from the street segments, extracted from open datasets

- Framework: Crowdsourced collection of safety levels; and predictive models

Findings

model	BE	S total	S type	BE + S total	BE + S type
Baseline	0.456				
XGBoost	0.572	0.548	0.596	0.620	**0.656**
Bagging	0.607	0.518	0.618	0.625	**0.654**
Random forest	0.635	0.526	0.570	**0.649**	0.616

Feature Importance