# Three Visible Cities: Understanding Urban Perception through Youth Action and Mobile Data in Mexico 

Salvador Ruiz-Correa ${ }^{1}$, Héctor Gómez Vargas ${ }^{2}$, Victor Islas ${ }^{3}$, Mariana Gonzalez Abundes ${ }^{4}$, Darshan Santani ${ }^{5,6}$, Daniel Gatica-Perez ${ }^{5,6}$

${ }^{1}$ Centro Nacional de Supercómputo IPICYT, México; ${ }^{2}$ Universidad Iberoamericana, México; ${ }^{3}$ Instituto Tecnológico Integral, México; ${ }^{4}$ Universidad Autónoma de Yucatán, México; ${ }^{5}$ Idiap Research Institute, Switzerland; ${ }^{6}$ EPFL, Switzerland


## Research Questions

1. How can local youth in Mexico be engaged and supported to document and reflect on urban concerns?
2. What kind of urban impressions do youth make about their environment?


## Results

21,000 images - $21,000+$ annotations - 265 urban videos - 60 audio notes - 300 interviews 12 workshops - 2 plenary sessions - 1 film festival featuring 13 short video documentaries


Heatmap computed using geo-localized images showing the areas marked as being of concern in Guanajuato


Urban problems detected based on a random selection of 1000 images. Problems are classified in two categories: image of the city (in purple) and infrastructure (in orange)


Plot showing the correlation matrix between urban dimensions. Black rectangular borders indicate the three distinct clusters found in the correlation matrix.

