# Tech for good Workshop

ImaginCafé

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# **Workshop Content**

- I. One solution for each type of problem
- II. Use cases
- III. Build your first interactive visualization

# I. One solution for each problem

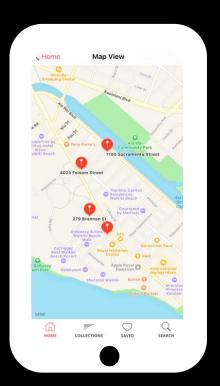
## **Interactive Visualization**

- Denounce social injustice
- Engage citizens in social problems
- Open knowledge to the society



# **Event Geolocation**

- Support social initiatives by geolocating them
- Denounce events
- Find areas of interest for minorities



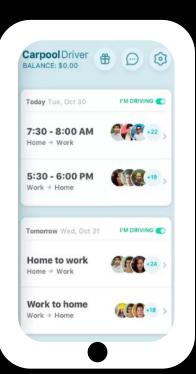
### **Coordination Platform**

- Coordinate small producers for complete services
- Coordinate collective decision making
- Food-cops cooperation
- Liquid democracy tools



# **Sharing Platform**

- Share resources to decrease the ecological footprint
- Share goods to reduce consumption



# **Forecasting Tool**

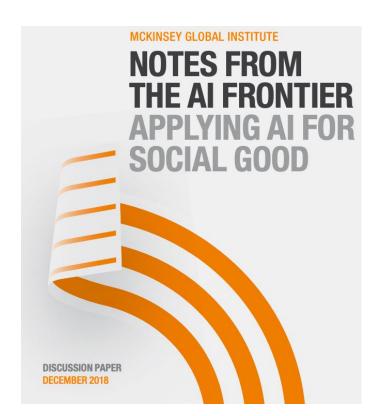
- Track a behavior and help users to predict future events
- Help planning and trigger changes on habits



# **Ai Assistant**

- Cross barriers for people with limitations
- Reader & Translator assistance





#### Mapping usage frequency of AI capabilities to ten social impact domains identifies patterns of the relevance and applicability of AI for social good.

Usage frequency of analytics capability for each domain

Analytics, eg, optimization, network analysis ower



Usage frequency of AI capability for each domain Domain Equality and Health and Info verification Economic inclusion and validation Environment hunger empowerment Security and Public and Capability ▼ Education justice Crisis response social sector Infrastructure Deep learning on structured data Natural language processing<sup>2</sup> Image and video classification Object detection and localization Language understanding Sound detection and recognition Sentiment analysis Language translation Face detection Tracking Emotion recognition Person identification Optical character and handwriting recognition Speech-to-text Content generation Reinforcement learning Near-duplicate or similar detection

# II. Use Cases

# Sexual Misconduct Tracker

### Sexual Misconduct Tracker

**Empathize** 

Problem **Definition** 

Ideate Solution

Build **Prototype** 

Test

societal blaming

further abuse

Fear

family ties

embarrassment

shame

isolation

reliving the experience

manipulation

Who will believe me? humiliation

workplace retaliation

financial dependence

### **Sexual Misconduct Tracker**

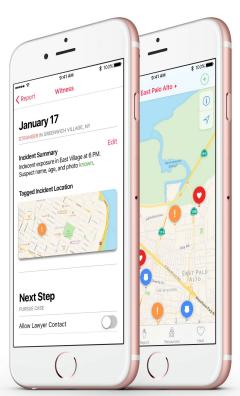
**Empathize** 

Problem Definition

Ideate Solution

Build Prototype

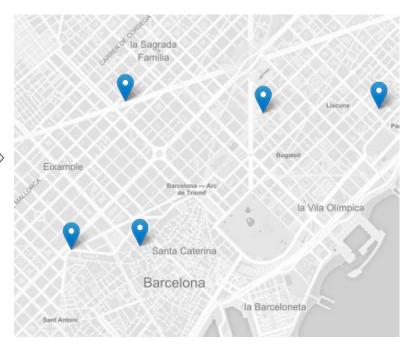




# Mapping: Leaflet

#### database

#### map



# How to make it happen?

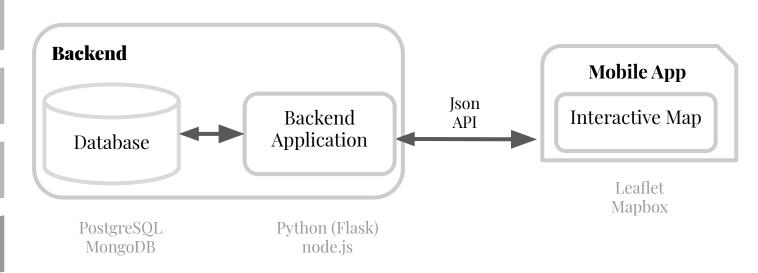
Empathize

Problem Definition

Ideate Solution

Build Prototype

Test



10k € - 30k € 2 - 3 months

# **Tenant Harassment Forecast**

### **Tenant Harassment in NYC**

Empathize

Problem Definition

Ideate Solution

Build Prototype



# Forecast high risk tenants

**Empathize** 

Problem Definition

Ideate Solution

Build Prototype



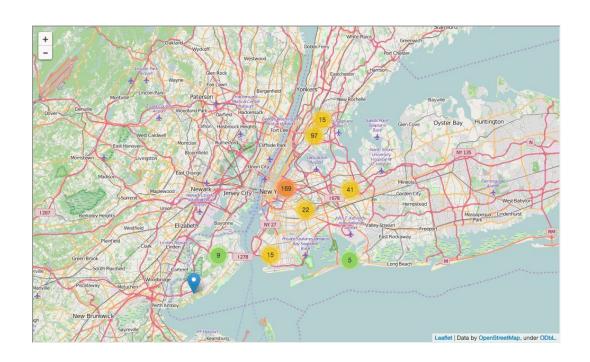
# Mapping: Folium

Empathize

Problem Definition

Ideate Solution

Build Prototype



# How to make it happen?

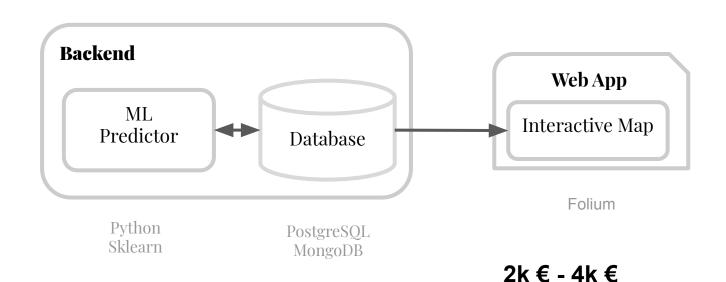
Empathize

Problem Definition

Ideate Solution

Build Prototype

Test



1 - 2 months

# Job Post Bias Correction

### **Job Post Bias Correction**

**Empathize** 

Problem Definition

Ideate Solution

Build Prototype



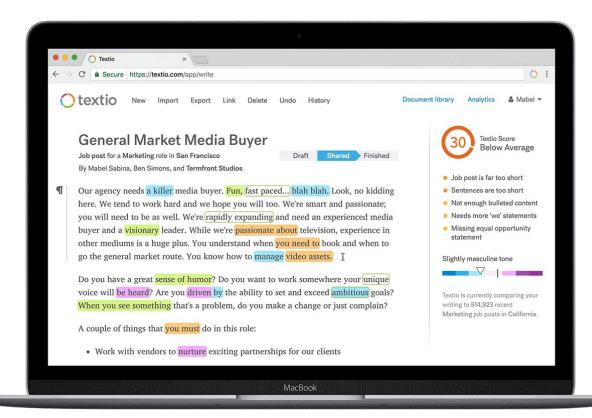
### **Job Post Bias Correction**

**Empathize** 

Problem Definition

Ideate Solution

Build Prototype



# **Augmented Writing**

**Empathize** 

Problem Definition

Ideate Solution

Build Prototype

Test



5% Higher Male Candidates



Average



8% Higher Female Candidates

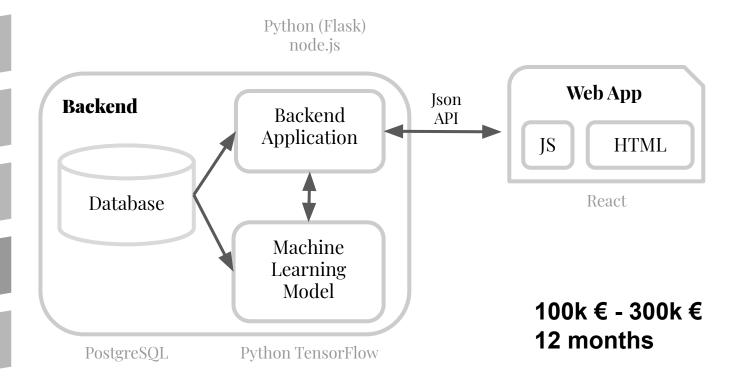
# How to make it happen?

Empathize

Problem Definition

Ideate Solution

Build Prototype



### **Pre-trained models**

**Empathize** 

Problem **Definition** 

Ideate Solution

Build **Prototype** 

Test



#### Reference

#### image

imageClassifier()

poseNet()

bodyPix()

UNET()

styleTransfer()

pix2pix()

CVAE()

DCGAN()

SketchRNN()

YOLO()

#### sound

soundClassifier() pitchDetection()

image



imageClassifier()





pix2pix()

poseNet()

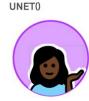


bodyPix()



CVAE()





Getting Started Reference Community About

DCGAN0



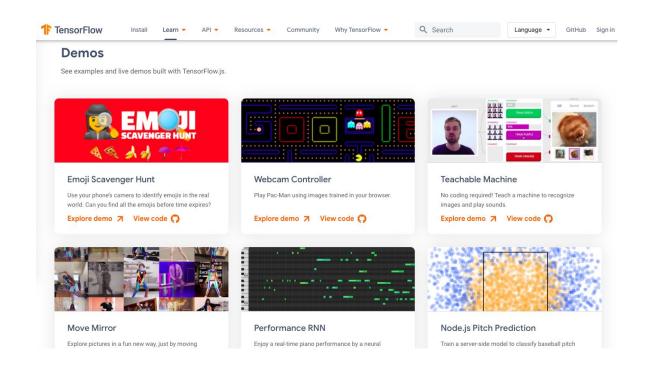
#### **Pre-trained models**

Empathize

Problem Definition

Ideate Solution

Build Prototype



# Build your first interactive visualization!

Go to this <u>notebook</u> and save a copy in your Google Drive

# Enroll now for the next Course in Sep 19

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