

#### Project Portfolio

**LinkedIn** 

**Github** 



- Predict Blue Bike
  Demand
- AI & ML Practice



Open Source LLM

Model applied on
qualitative &
quantitative data

#### Social 69 Science

- Non Profit Analysis
- Social Impact Analysis



- Gait Analysis
- **Employee Attrition**

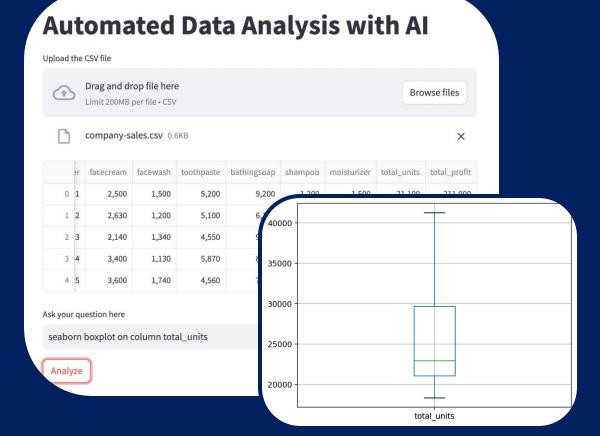
# Apply GenAl on your File Insert your file Drag and drop file here Limit 200MB per file • PDF Interview\_Transcript.pdf 72.4KB Ask your question here how old is Willie Carter seventy-two years old

Huggingface Open source LLM Model

Deploy Locally



# History Question 1: Give me a summary of this file Answer 1: Willie Carter was a Vietnam veteran who was drafted into the military. Question 2: how old is Answer 2: seventy-two years old





#### Bike Demand by stations in 2021 42.38 Indicator High 42.37 Low <u>to</u> 42.36 rides\_num 20000 40000 42.35 60000 42.34 -71.150 -71.125 -71.100 -71.075 -71.050 lon

Metrics	Linear Regression	LR-Lasso Regression	SVR	Random Forest	XGBoost Tree	Neura Net
RMSE	210.61	210.63	185.66	120.55	94.90	93.70
R Square	0.5042	0.5042	0.6148	0.8379	0.8993	0.901

Using Machine Learning to Predict Blue bike Demand in Boston, MA

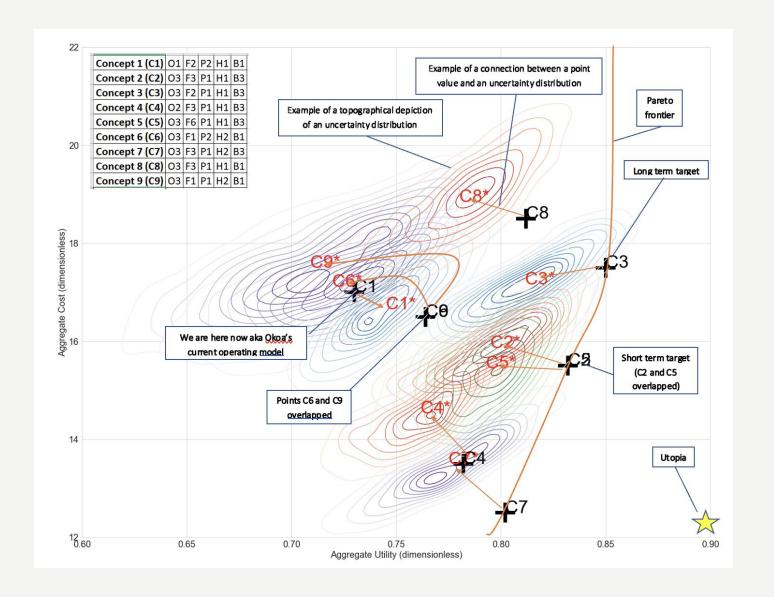


#### SELECTED EXAMPLE

#### PREDICT BLUE BIKE DEMAND



### **SOCIAL IMPACT ANALYSIS**

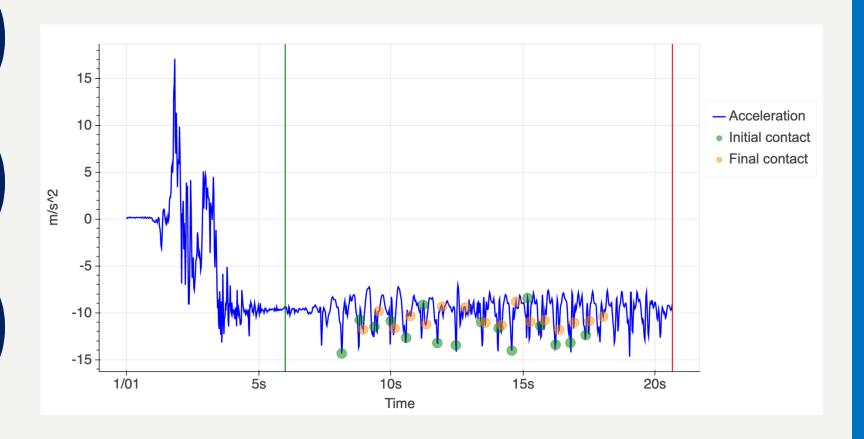


System Complexity
Analysis to help Okoa
(a NGO providing
ambulances in Africa)
transfer to a hybrid
social enterprise with
recommended Model

Language: Python



## GAIT ANALYSIS



Convert Accelerometer Data into Gait Metrics from Wearable sensors using Pre-trained Random Forest Classifier

Language: Python



#### SELECTED EXAMPLE

**Employee Attrition by Total Work Year** 

#### **EMPLOYEE ATTRITION**

Data Analysis Summary on Employee Attrition

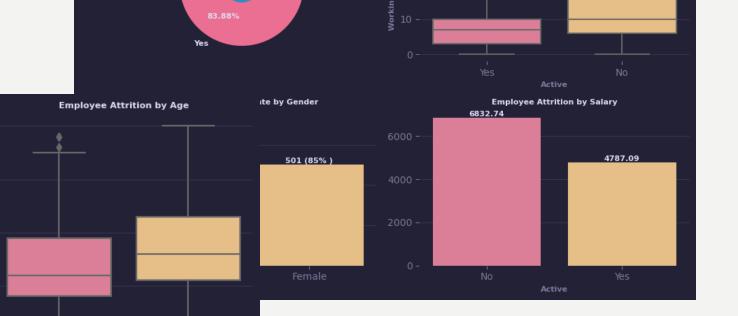
**Employee Attrition by Age** 

Language: Python



Attrition Yes

No



**Employee Attrition Counts**