# Daisy Intelligence Hackathon

## Track 3: Geography & Space Challenge

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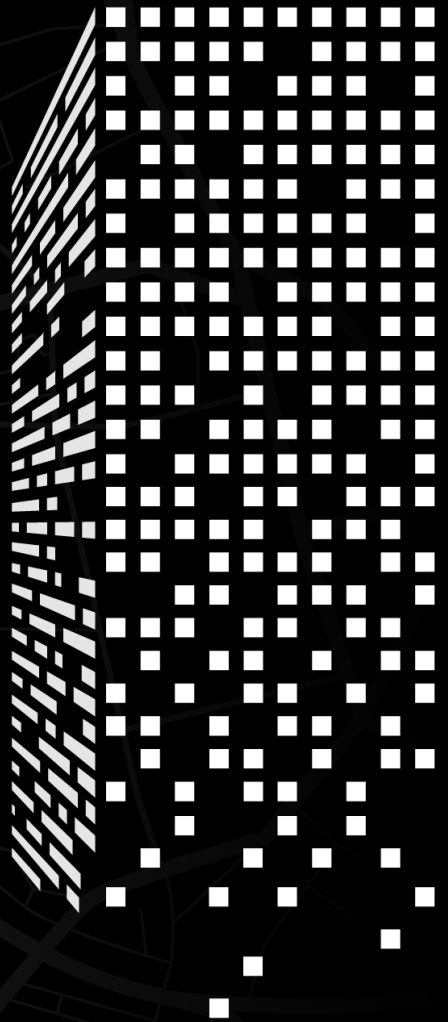


# Problem Statement

Bicycle theft is a serious problem in Toronto, since over 4000 bikes were stolen in 2020 (a 3x increase from 2014)

# Our Solution:

# What is bicyc-L?

"bicyc-L uses a predictive Machine Learning model to rate the City of Toronto's bike racks as 'safe' or 'unsafe', to provide riders with guidance on secure parking locations"

# Building bicyc-L

## Datasets

The TPS' Bike Theft and Toronto's Outdoor High-Capacity Bike Parking datasets were combined.

## Libraries

Numpy, Pandas, and Regex were used for data manipulation. Knime was used to create and train the model.

## Model

bicyc-L uses a generalized linear regression model due to its simplicity and accuracy.

# Impact of bicyc-L

## Fewer Incidents

Less bicycle theft due to safer parking locations

## Fewer Police Resources

Resources go to problems other than bike theft

## Fewer Worries

Theft will be less of a concern to bike riders

## More security

Cyclists can be confident that their belongings are secure

## More savings

New bikes do not have to be purchased as often

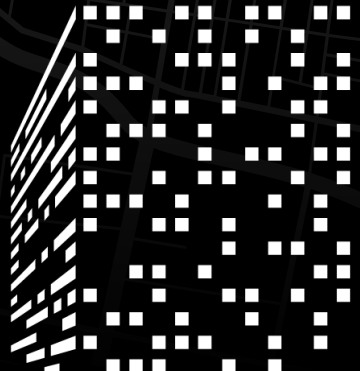
# What's next for bicyc-L

## Expanded Cities & Towns

Areas outside the City of Toronto to be included

## Complete Front-End

Front-end application is to be developed



## Location-based Recommendations

Users be given recommend racks based on location

# Thank You!