

# InsidInsight

Strategic Airbnb Optimization via Big Data & Agentic AI

## Does this sound familiar?

"I just set my price and hoped for the best. I had no idea if I was leaving money on the table."

"My guests write reviews but I never really know what they're telling me."

"I know my competitors exist — I just can't see what they're doing."

## What InsidInsight does for you



1

### See your exact pricing opportunity

We compare your nightly rate against every similar listing in your neighbourhood and show the exact annual revenue you could be earning.



2

### Understand what guests really think

We read thousands of your reviews and turn them into a simple scorecard — top praise, top complaint, and what needs attention.



3

### Get a specific AI action plan

Our AI advisor gives you exact recommendations: raise your rate by \$X, highlight your location, fix your check-in. Every suggestion cites your data.

## The scale behind it

1,955,039

data rows processed

35,957

listings analysed

5 cities

US markets covered

Austin · Chicago · Nashville · Seattle · Twin Cities

3-layer

Spark pipeline

## Technology stack

Apache Spark

Databricks

Delta Lake

PySpark

VADER Sentiment

LangGraph

Streamlit

Python

HuggingFace

Inside Airbnb CC4.0

## Built for



### Individual hosts

Optimise your listing, understand your guests, price with confidence.



### Property managers

Monitor multiple listings in one dashboard with city-level benchmarks.

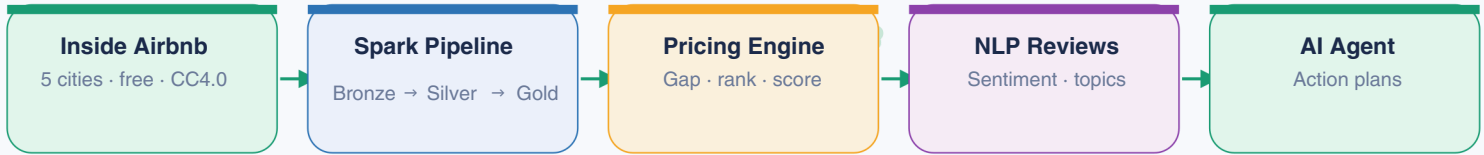


### Market researchers

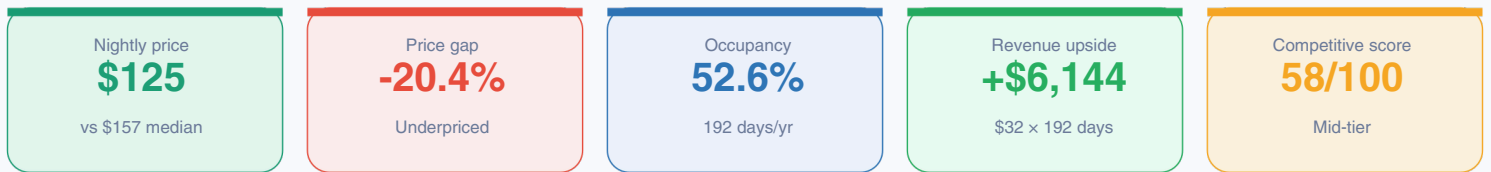
Explore pricing and occupancy patterns across 5 US cities.

# InsideInsight : Results & Technology

## How we process 1.95 million rows

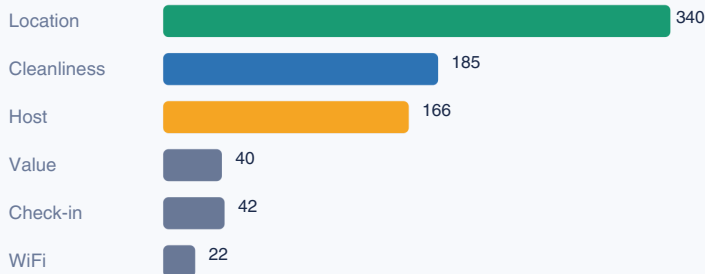


## Sample dashboard output — Chicago listing



**+ AI output:** "Raise your rate by \$32/night — at 192 days occupancy this recovers \$6,144/year. Formula: gap x occupancy days."

## Review intelligence - mentions



## Features

Capability	InsideInsight
Price gap analysis	Yes — by room type
Review NLP (7 themes)	Yes
Agentic AI action plan	Yes — data-grounded
Revenue upside formula	Yes
Cost	Free

Sentiment: Very Positive

Praise: Location

Complaint: Cleanliness

## Meet the Team



**Bhavisha Chafekar**

[bhavisha-chafekar](#)



**Jyothirmai Sri Peesapati**

[jyothirmai-sri-peesapati](#)



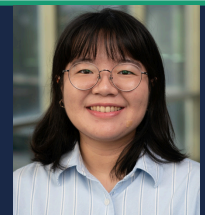
**Phoenix Ferrari**

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