

From Pedestrian Emotion to Human-Centered Urban Renewal

A closed-loop AI platform that connects streetscape, human emotion and urban planning



01 WHY THIS PROJECT?



PLANNING GAP

Cities drawn from above.
Experienced at eye level.



MISSING METRIC

Pedestrian comfort absent
from blueprints.



UNEVEN BURDEN

Barriers hit vulnerable walkers
hardest.



WALKING=DIALOGUE

The most direct body-city
interaction.



Cognitive Overload

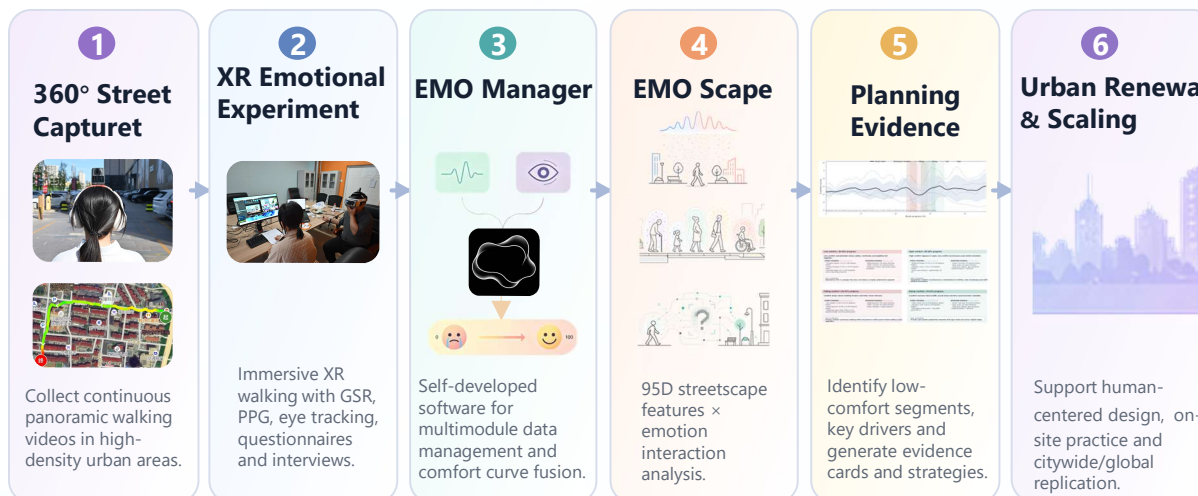
Complex information and
visual clutter reduce comfort

Our Goal

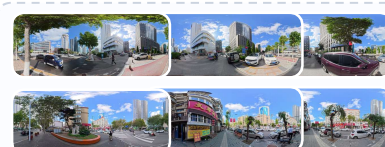
Reveal the interaction between
streetscape and pedestrian emotion,
and transform insights into
actionable urban solution

02 COMPLETE RESEARCH FRAMEWORK

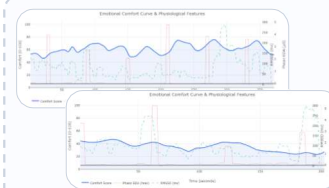
Closed-loop Human-Centered Evaluation System



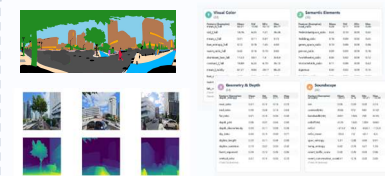
KEY OUTPUT PREVIEWS



Streetscape Frame



Comfort Curve



Street Scene Feature Extraction

Human signal	Computer evidence	Planning implications
Emotional state (e.g., stress, happiness)	Visual clutter, pedestrian volume, etc.	Reduce visual clutter, optimize pedestrian volume, etc.
Physiological state (e.g., heart rate, skin temperature)	Temperature, humidity, etc.	Optimize temperature, humidity, etc.
Behavioral state (e.g., walking speed, direction)	Obstacle distribution, etc.	Optimize obstacle distribution, etc.

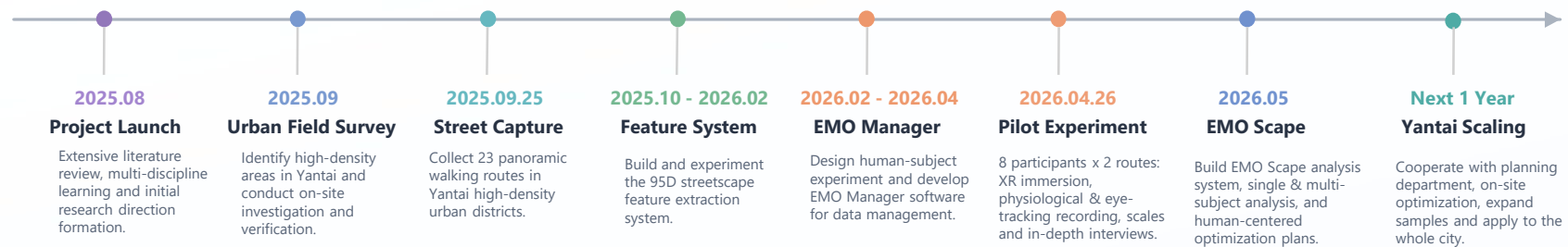
Evidence Card Preview



Optimization Plan Preview

03 PROJECT TIMELINE

From Research to Real-World Impact



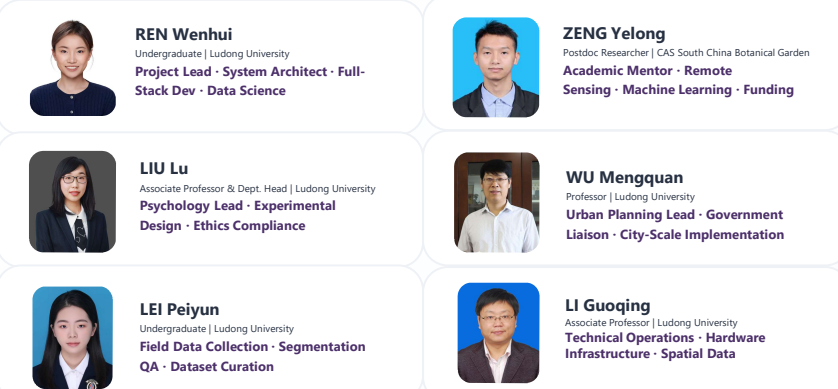
04 PILOT ACHIEVEMENTS

Building a Complete Human-Centered Pipeline



05 INTERDISCIPLINARY TEAM

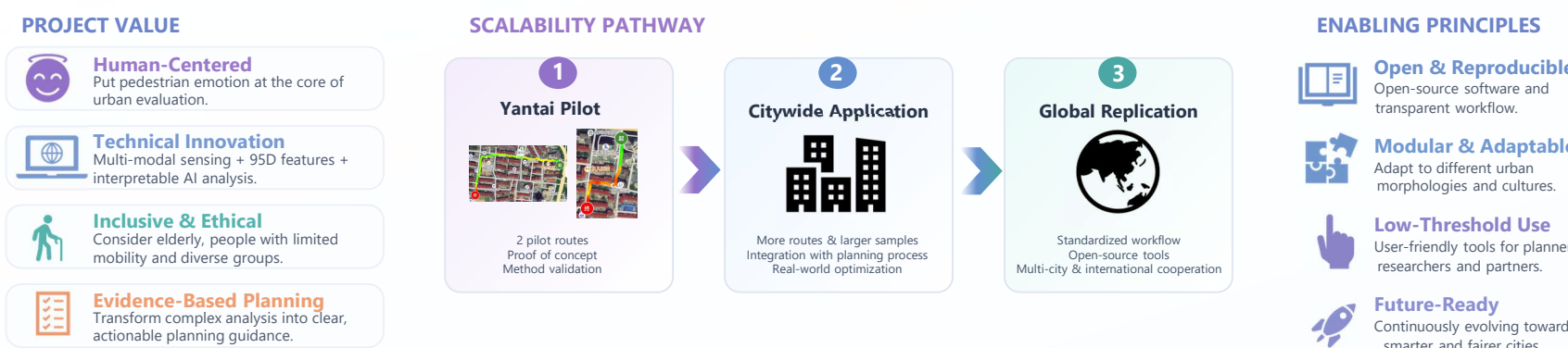
Diverse Expertise, Shared Vision



Cross-sector coalition uniting academia, research institutions, and urban planning practice to bridge human emotion and built environment.

06 IMPACT & SCALABILITY

From Local Pilot to Global Platform



We measure how cities feel, so we can design how they should be. ❤️