

EAGER: Collaborative Research: Modernizing Cities via Smart Garden Alleys with Application in Makassar City

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Project Goal

Transform the garden alleys of Makassar City, Indonesia into smart environments to improve the quality of life of residents and visitors and to enable the offering of new services

Intellectual Merits

- Assessment of real-world smart urban gardens in Makassar City, Indonesia
- Deployment of smart sensor networks to monitor urban gardens
- Novel machine learning frameworks for the operation of smart garden alleys

Project Activities

- Assessed six garden alleys and found discrepancy in the performance/success
- Designed and deployed sensor network to monitor outdoor micro-environment
- Conducted interview and survey in identified garden alleys

Local Survey in Garden Alley

Makassar, Indonesia



Broad Impacts

- Enhance the economic revenues through increased visitor
- Improve agriculture/crops
- Decision making framework for city

Next Steps

- Collect environmental data
- Create a framework to represent the generated data
- Analyze data to identify factors that impact the quality of the garden alleys

Project Website: <https://sites.psu.edu/sbslab/research/city/smart-garden-alleys/>

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