

Toby Flenderson

# CITY MADNESS

Toby Flenderson

# SOLIVAGANT

a project by

Toby Flenderson

# Motivations and Concept

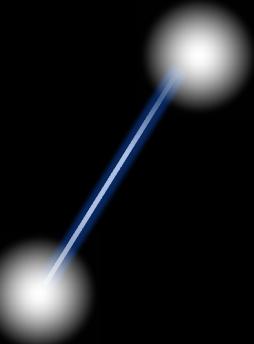


# Motivations and Concept

Cities have been an inspiration and site for many artistic expressions



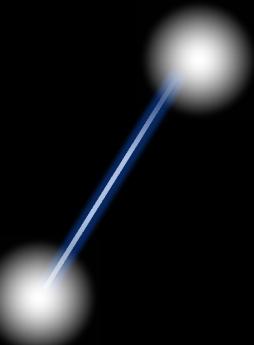
# Motivations and Concept



Active Interpretation and Creative Response



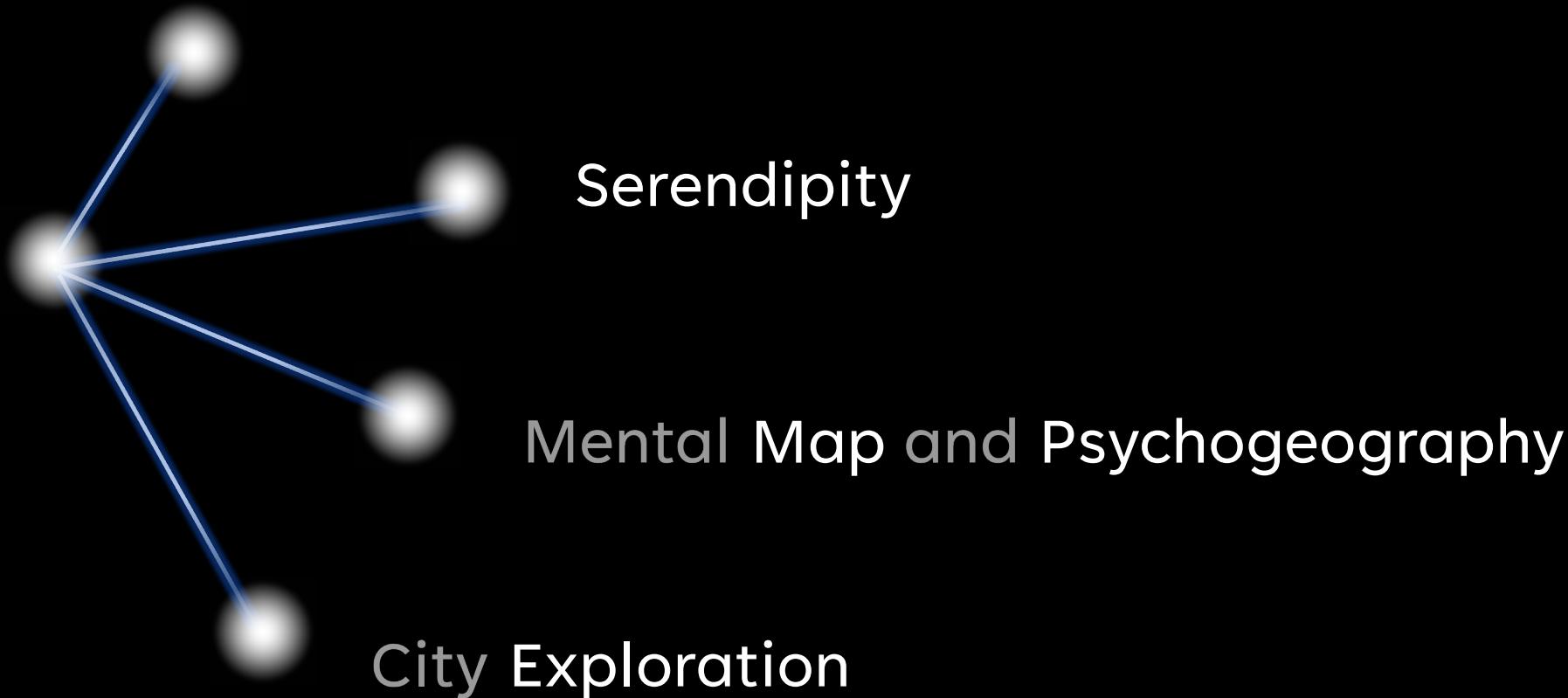
# Motivations and Concept



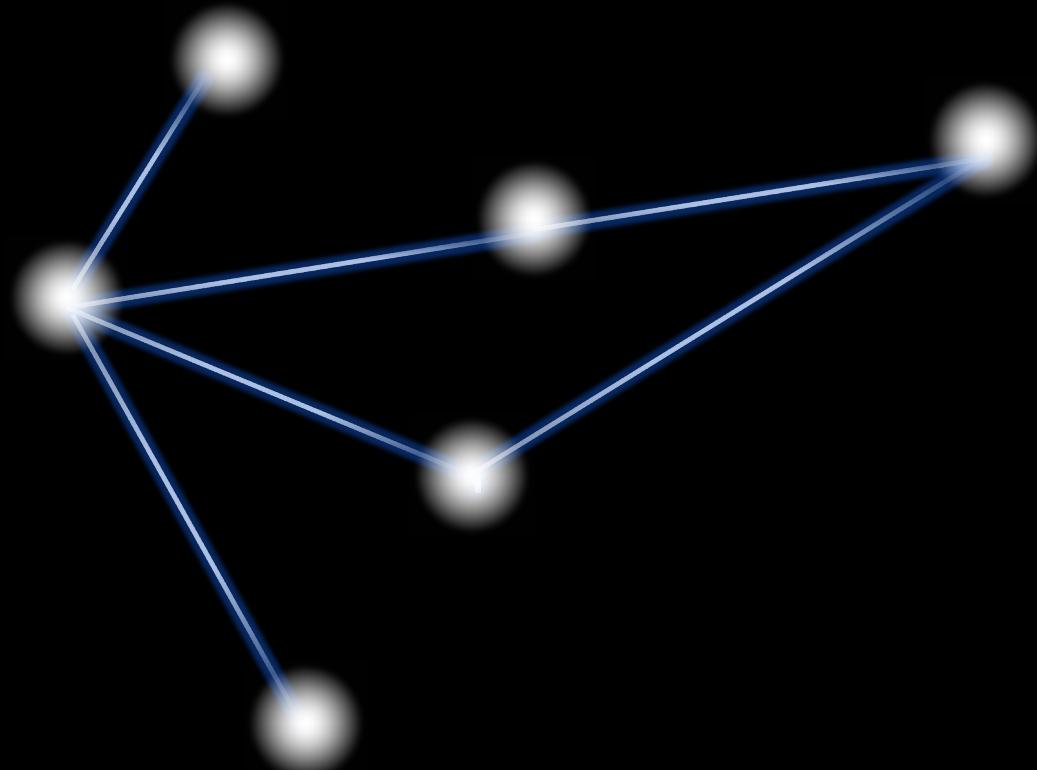
Active Interpretation and Creative Response



# Motivations and Concept



# Motivations and Concept



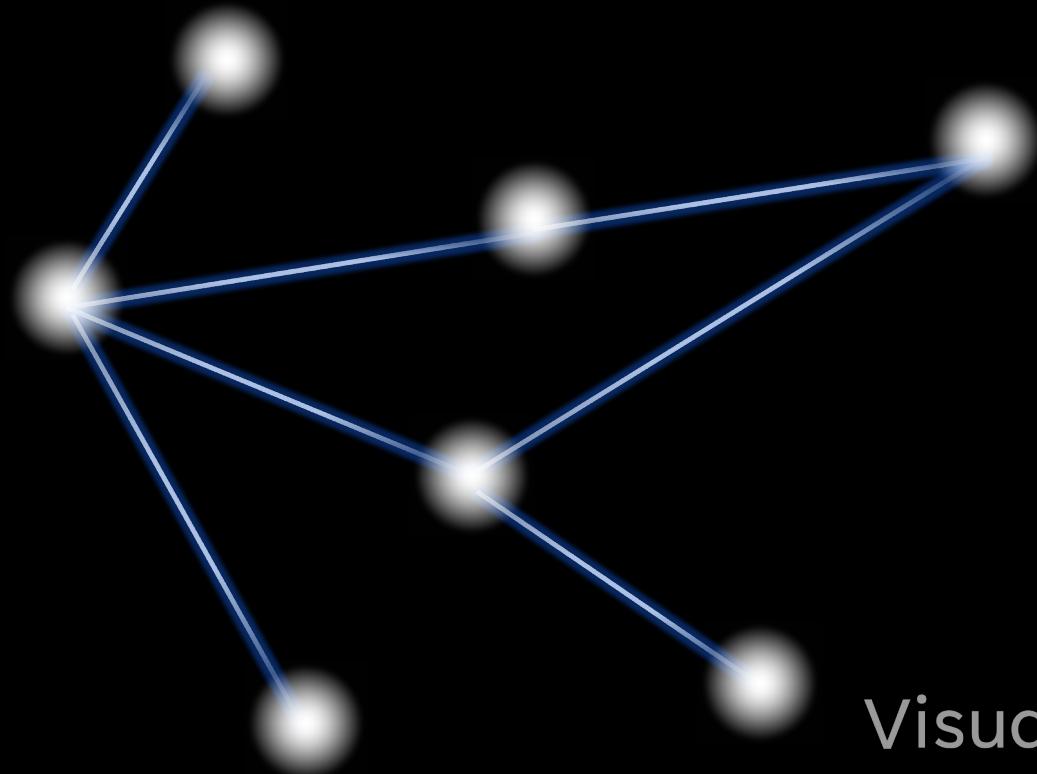
Map as a Musical Interface

GAYE, Lalya; MAZÉ, Ramia; HOLMQUIST, Lars Erik.  
Sonic City: the urban environment as a musical interface. In: NIME. 2003. p. 109-115.



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# Motivations and Concept



Visual representation of the City

GAYE, Lalya; MAZÉ, Ramia; HOLMQUIST, Lars Erik.  
Sonic City: the urban environment as a musical interface. In: NIME. 2003. p. 109-115.



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# CONTEXT

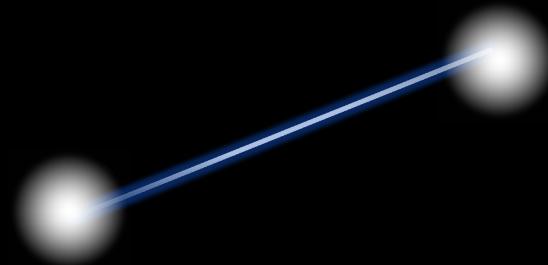


# CONTEXT

- Fully-fledged conversational system



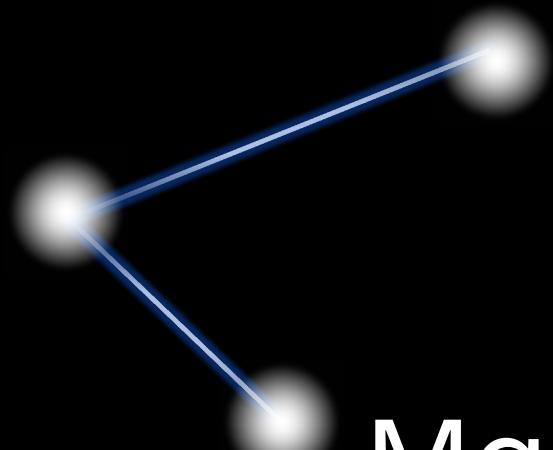
# CONTEXT



Particle System



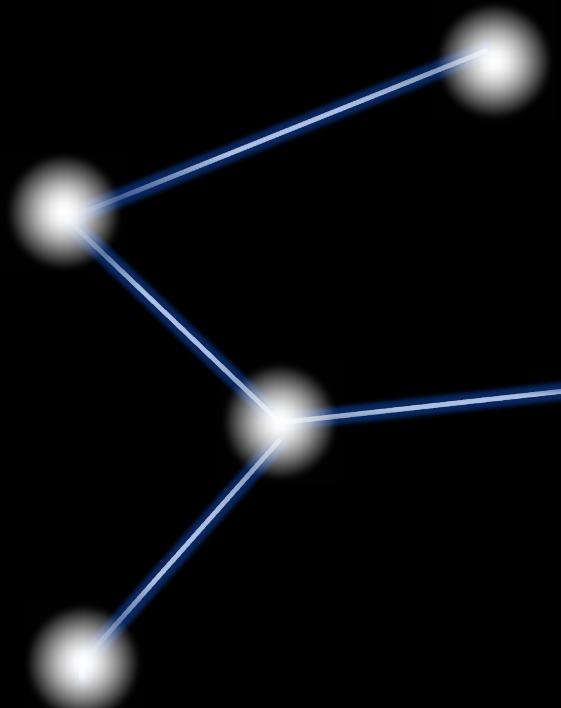
# CONTEXT



Markov Decision Process



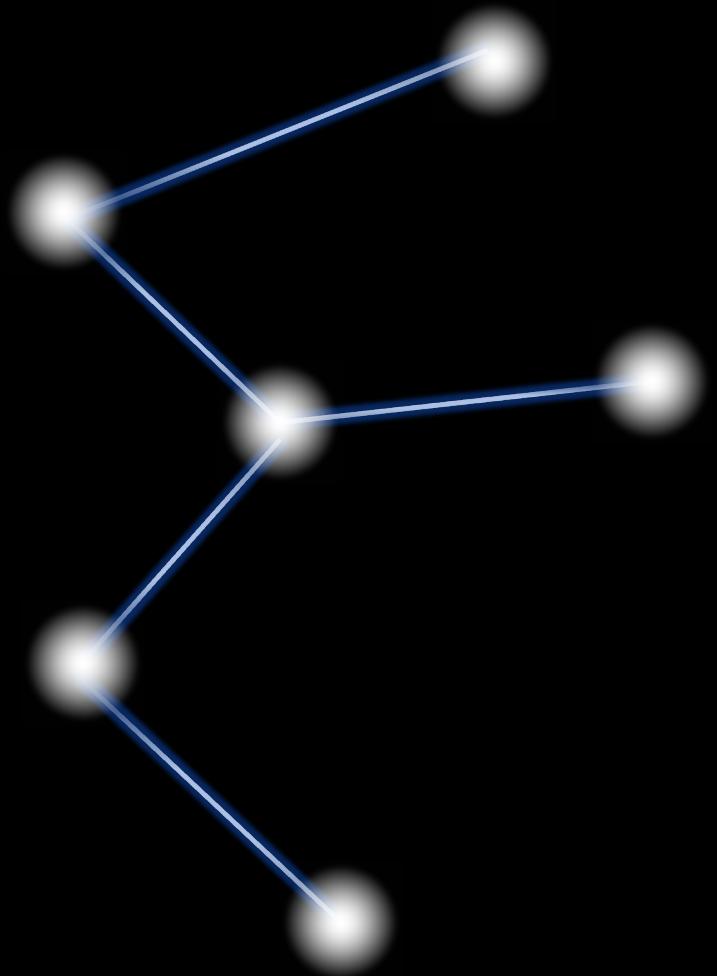
# CONTEXT



Grammar-based Agents



# CONTEXT



# EXPERIENCE OUTLINE



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CHI AOS



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STARTING POINT



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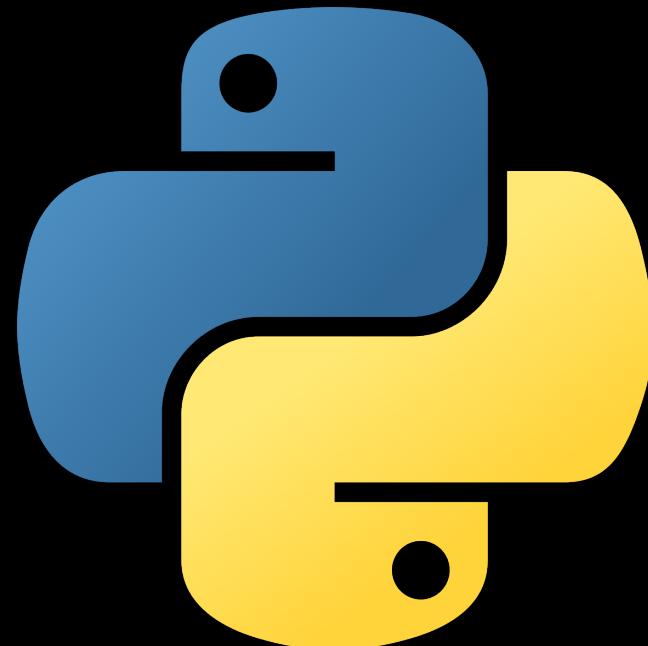
# EXPLORATION



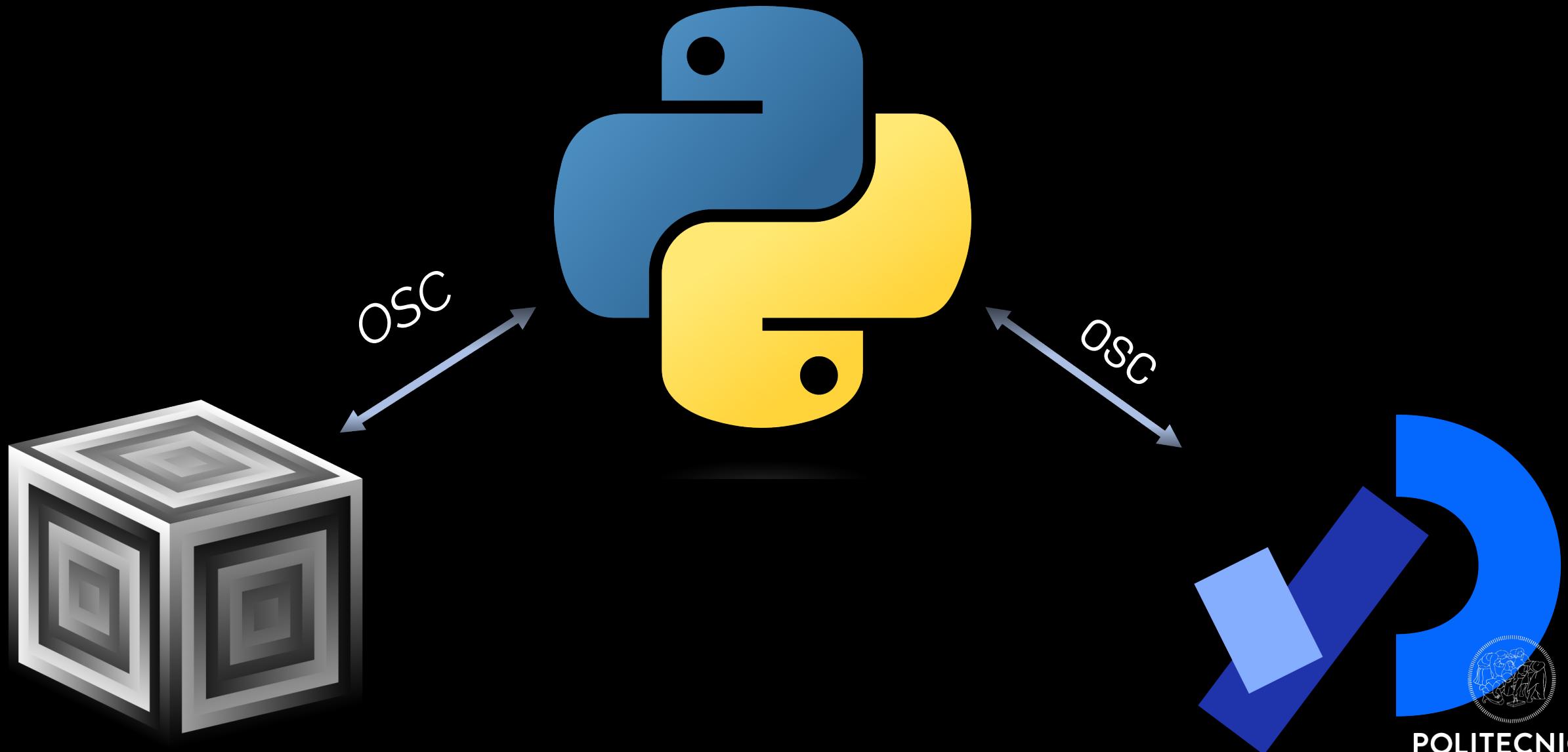
# SYSTEM OUTLINE



# SYSTEM OUTLINE



# SYSTEM OUTLINE



# Python



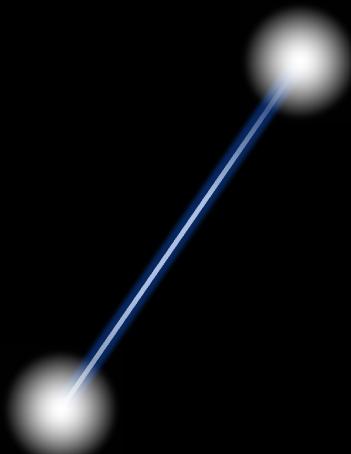
# Python

Framework for solving  
decision-making processes.  
In this case Pathfinding



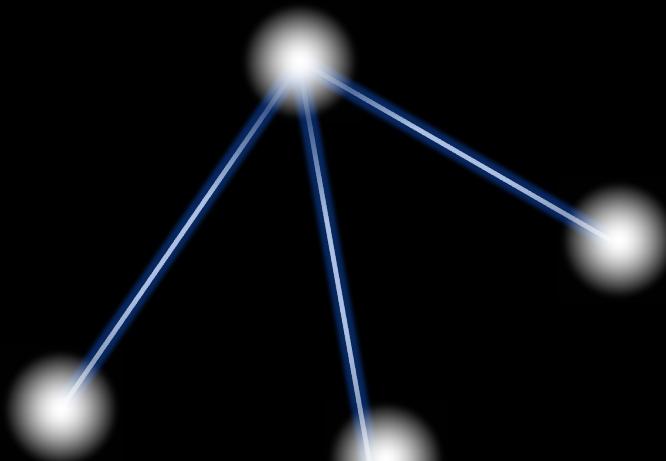
# Python

Has access to all the data  
from the GeoJSON



# Python

Has access to all the data  
from the GeoJSON



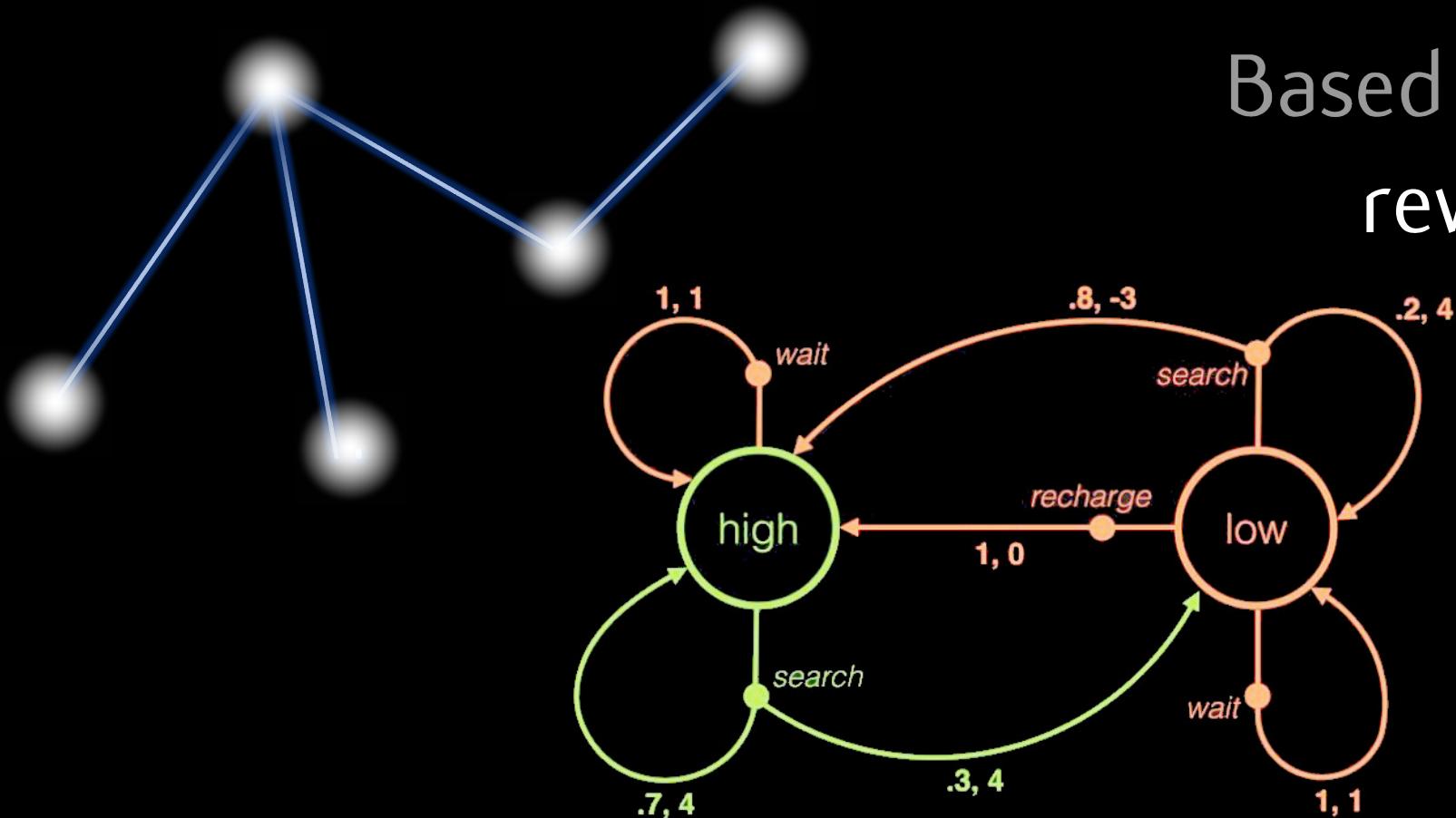
Distance between nodes

Connections



# Python

Based on maximising a  
reward function



# Processing



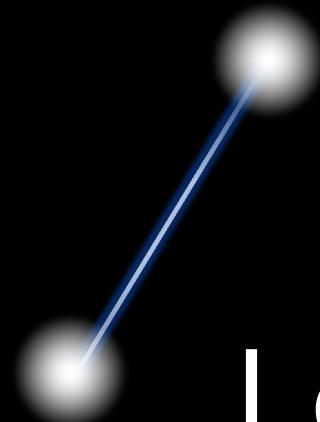
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# Processing

In constant  
dialogue with  
Python back-end



# Processing

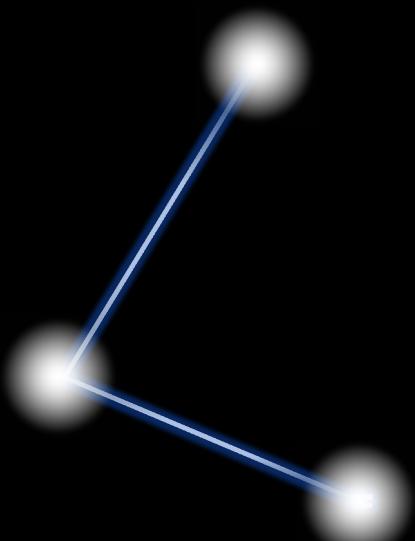


Learns about the  
city environment  
with the user



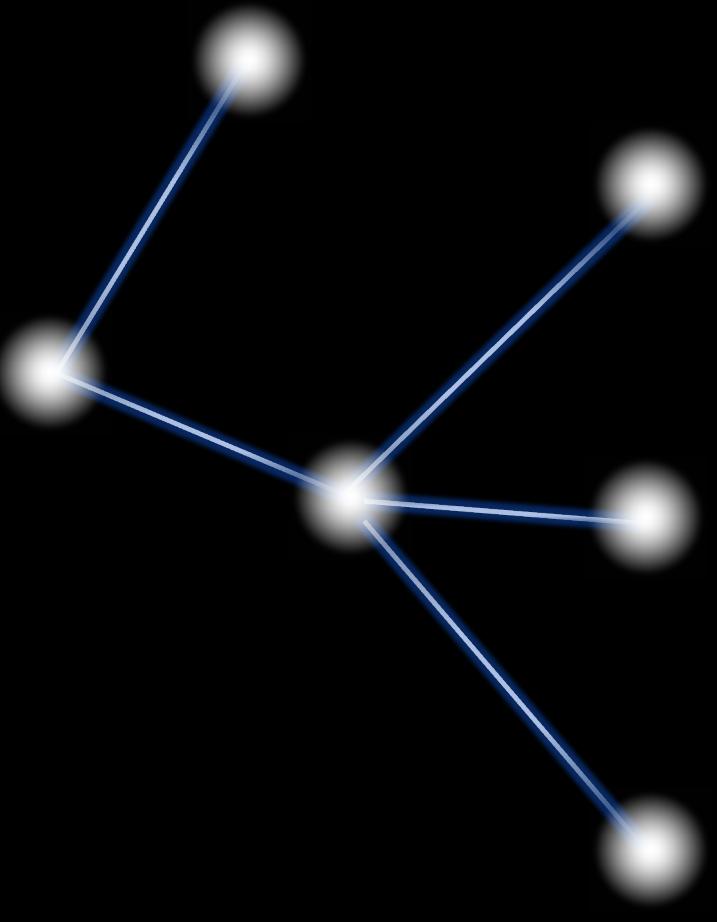
# Processing

Multiple layers of  
visualization



# Processing

Multiple layers of  
visualization



Chaotic Particles

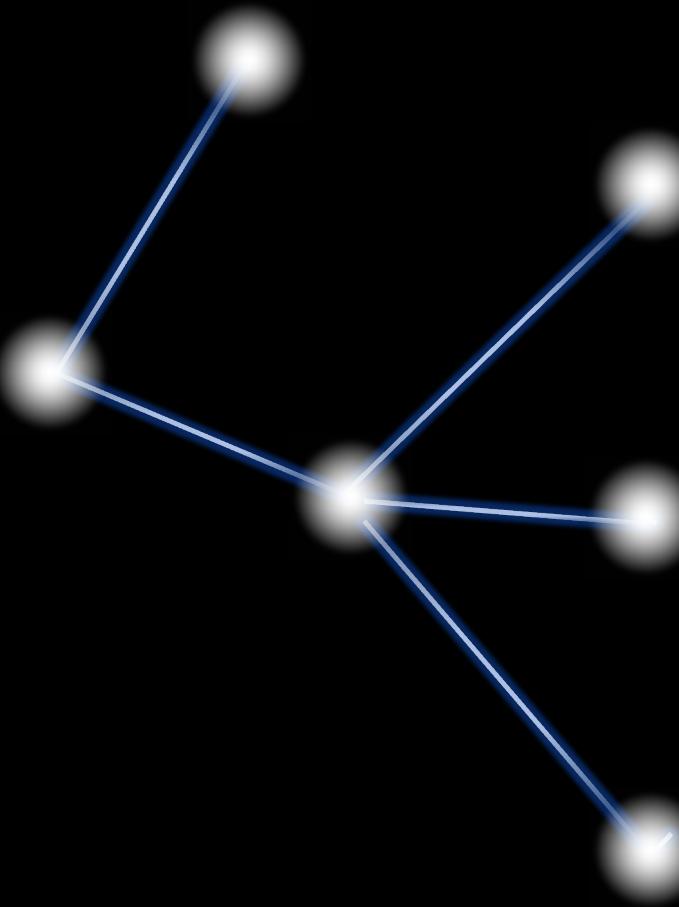
Path Particles

Wandering Particles



# Processing

Multiple layers of  
visualization



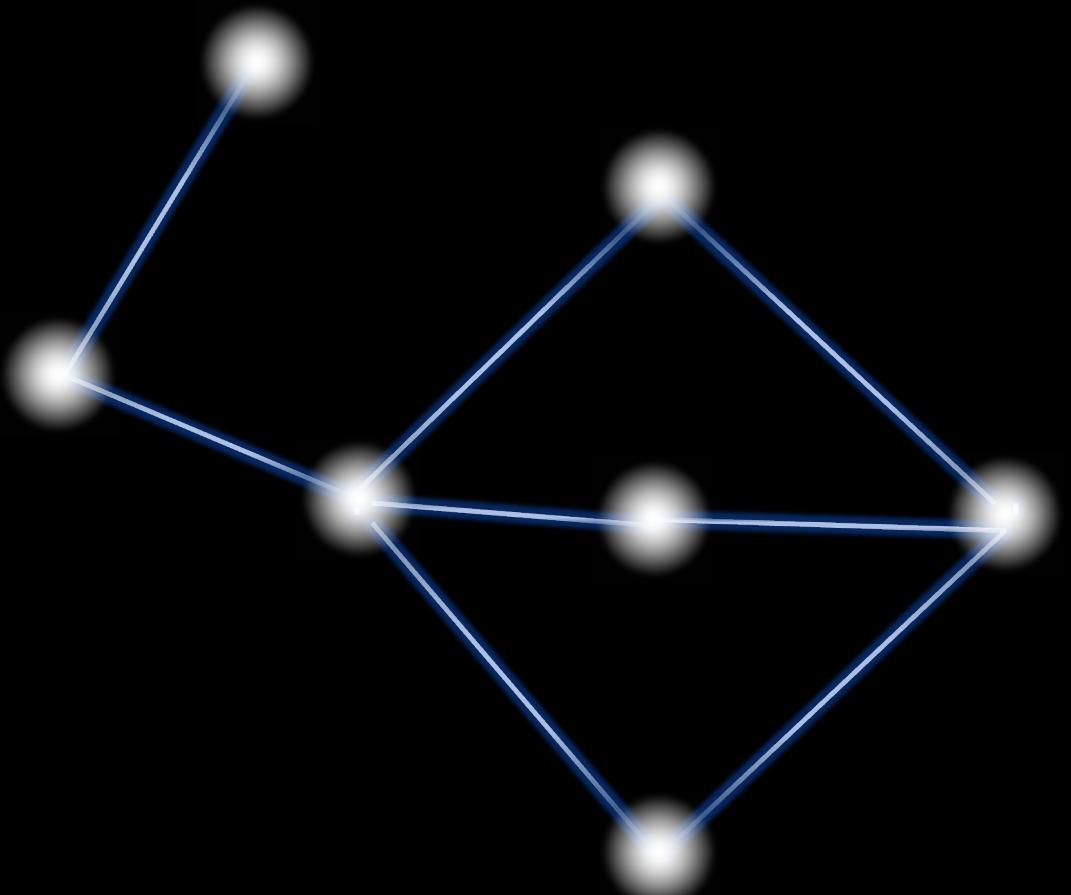
Ideas, expectations

Clear memory

Partial memory



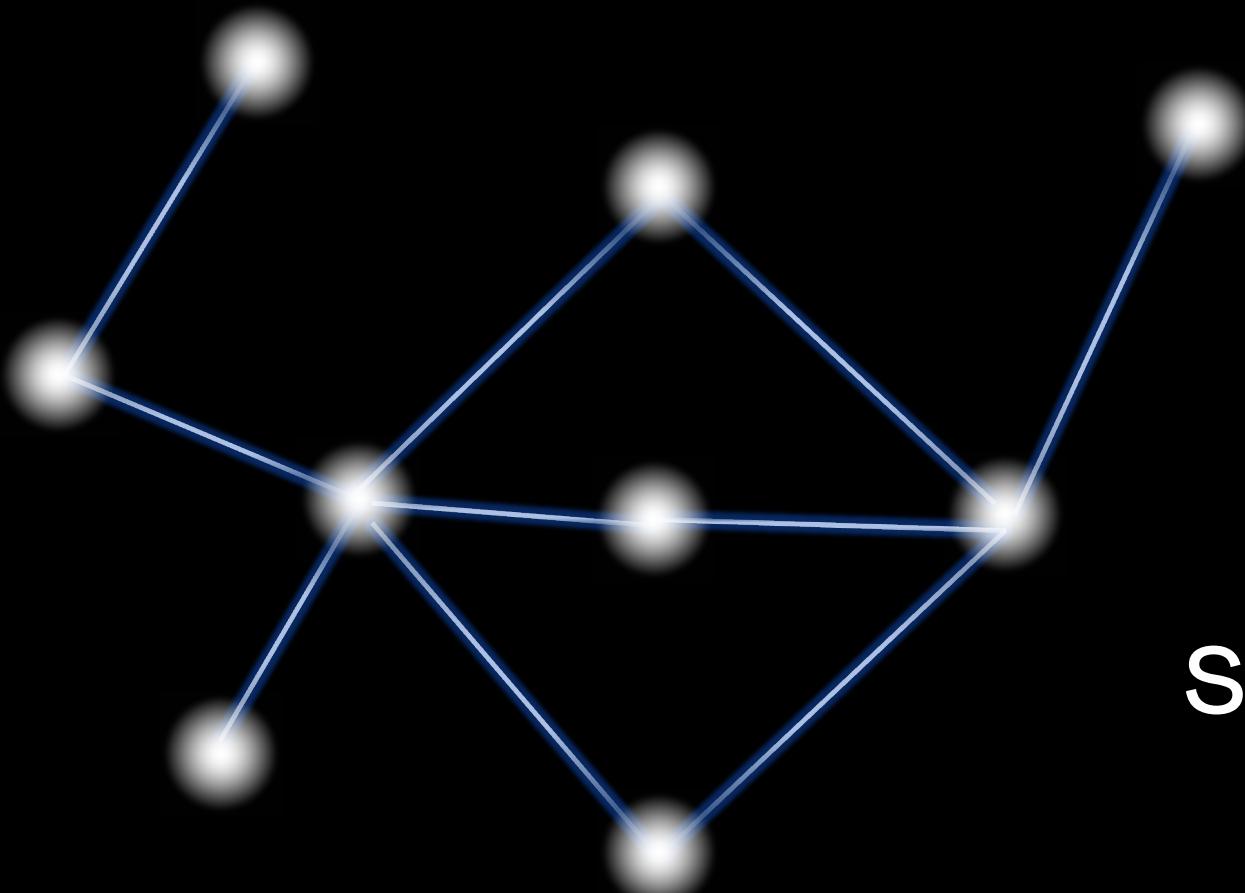
# Processing



Map evolves as  
the user wanders  
in the city



# Processing



Interest Points  
allow the user to  
develop a large-  
scale knowledge of  
the city



# *Supercollider*



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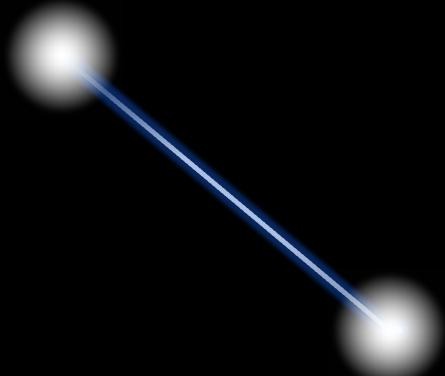
# *Supercollider*

*Handling of the Sound Design*

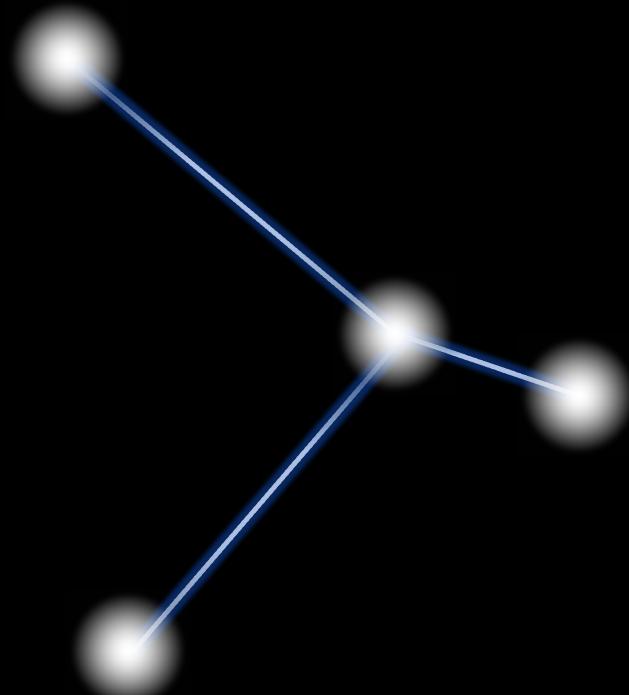


# *Supercollider*

*Layers of the Composition*



# *Supercollider*



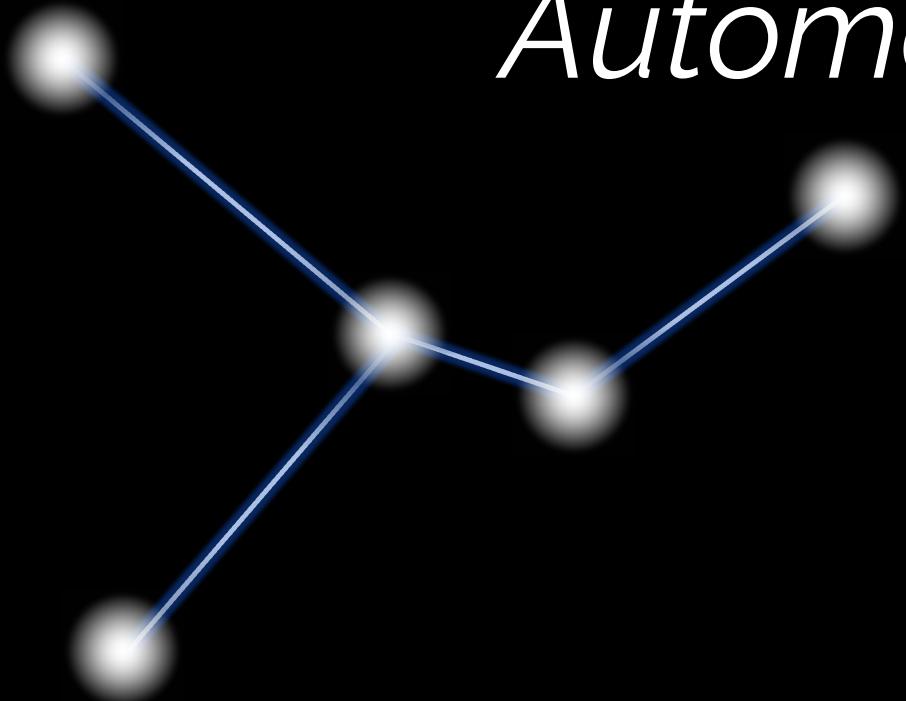
*Soundscapes  
Recordings*

*Granular Synthesis*

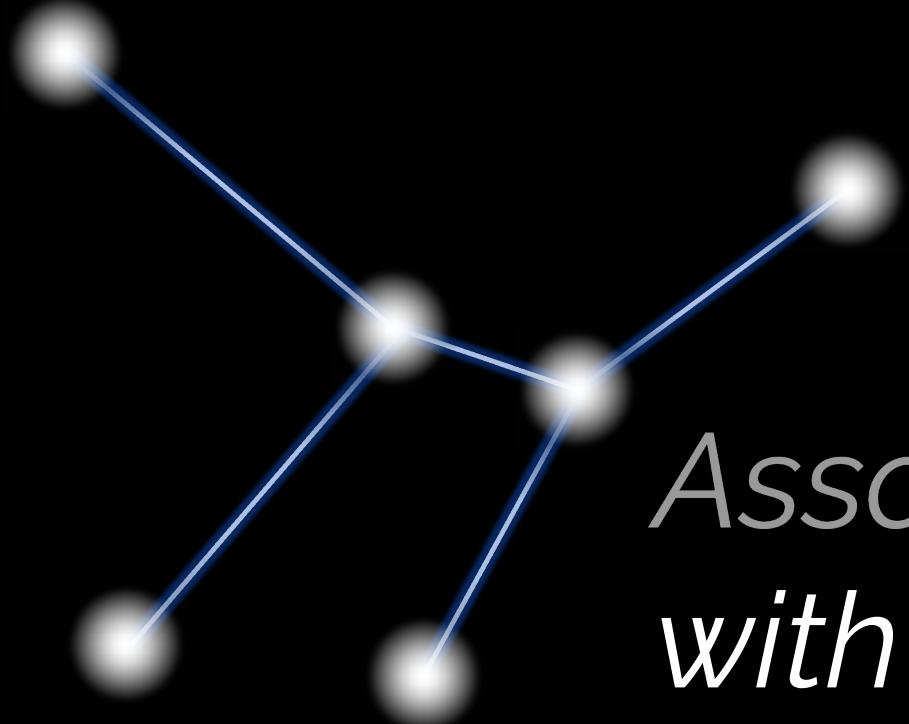


# *Supercollider*

*Automatic Music Composition*



# *Supercollider*



*Association of the direction  
with music composition*

MASON, Stephanie; SAFFLE, Michael. L-Systems, melodies  
and musical structure. Leonardo Music Journal, 1994, 31-38.



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# EXPLORE



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