



**FLAME**

FACILITY FOR LARGE-SCALE ADAPTIVE MEDIA EXPERIMENTATION

# Adaptive Media for Storytelling and Gaming

Game Technology Center (ETH Zurich)

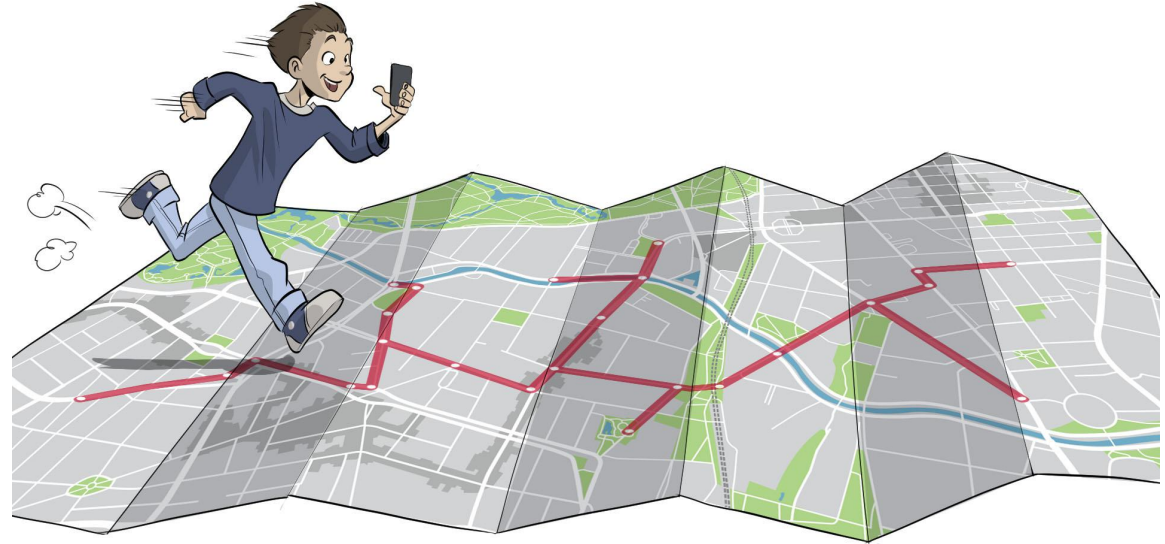
*Julia Chatain*

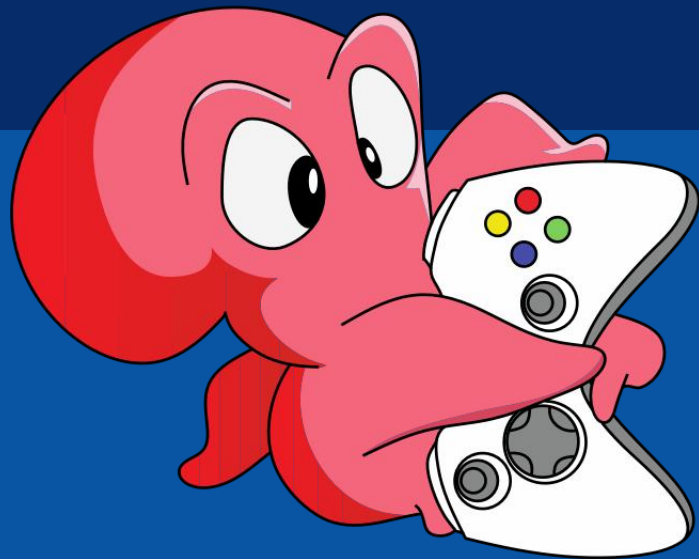
NEM Summit 2017

30/11/17



- Personalisation
- Interaction
- Mobility
- Localisation





**ETH** zürich

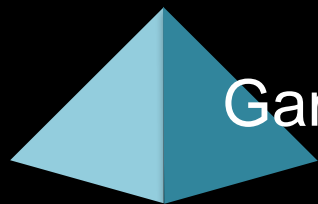
# Game Technology Center

Game Technology Center - ETH Zurich

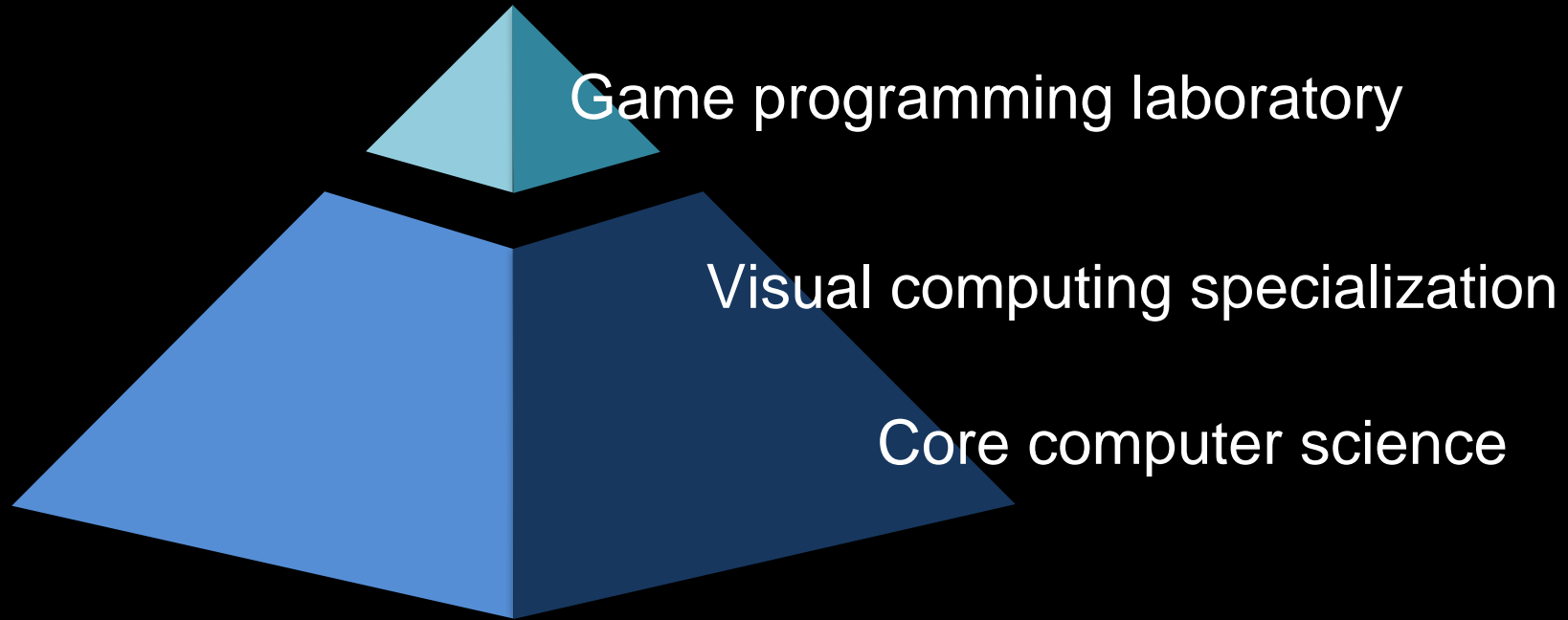
AUGMENTED REALITY LOCATION BASED GAMING

Education | Research | Outreach





Game programming laboratory





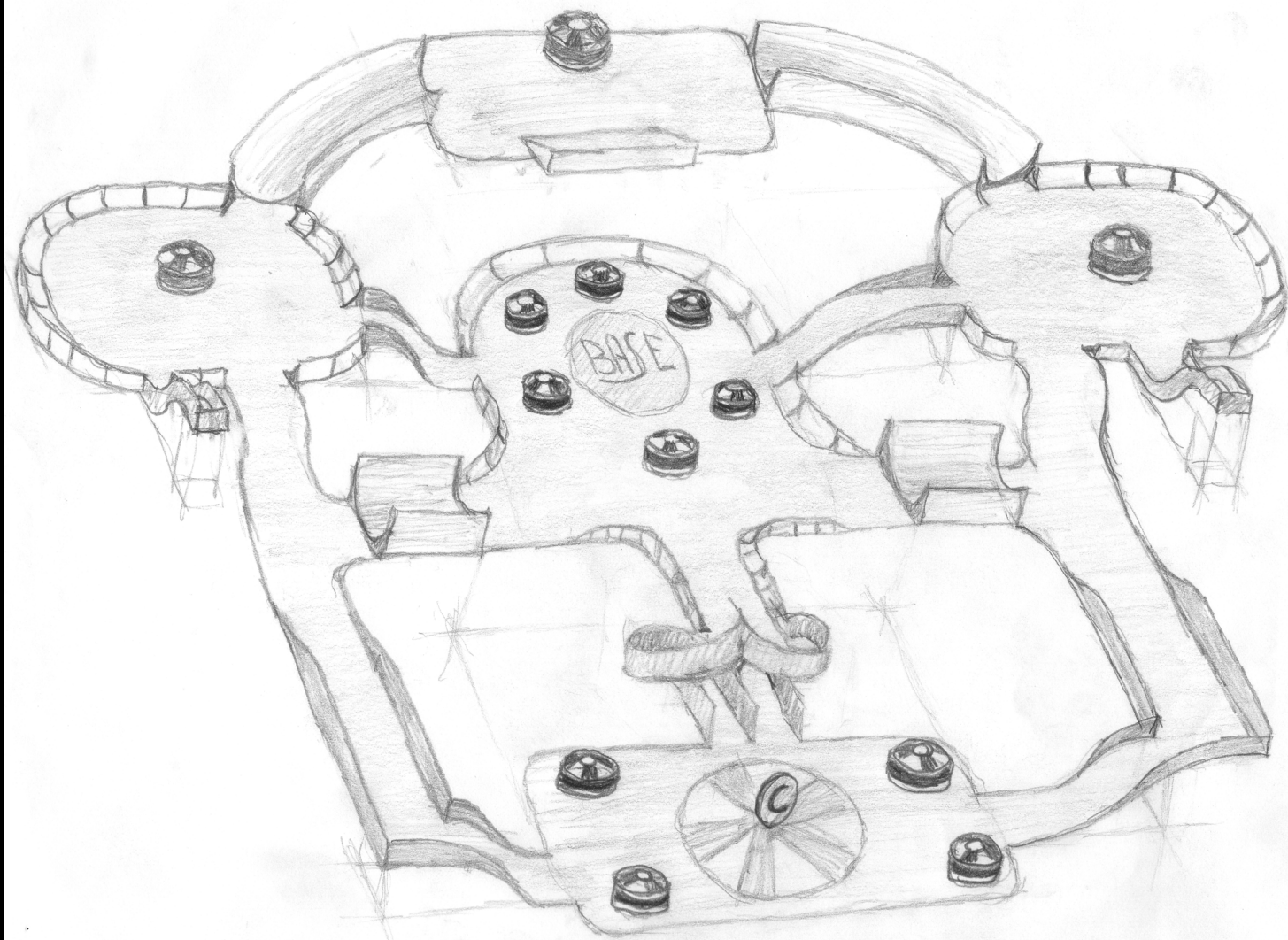
Design



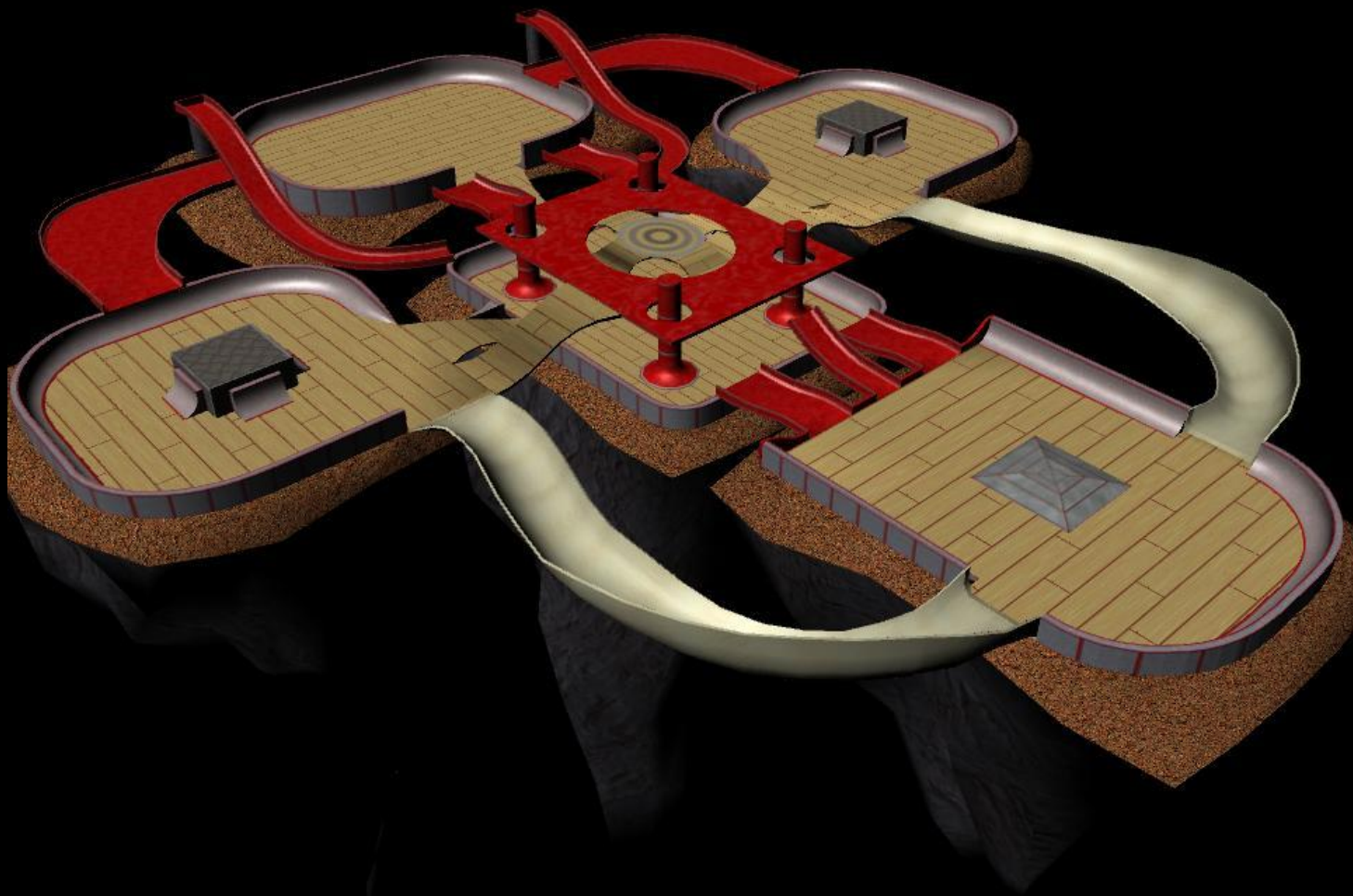
Development



Refinement













Education | Research | Outreach







**ETH** zürich



**Z**

hdk

Zürcher Hochschule der Künste  
Zurich University of the Arts



30 publications



3 PhD students  
+ many MS & BS



## Research Mission

Apply advanced concepts in gaming together with analytics and machine learning to better understand human behavior.

# Game Science Platform

- Authentication & Identities
- Synchronization



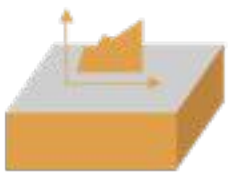
- Storage
- Multicasting & Public display



- Notifications
- Localization & Geocoding



- Augmented Reality
- Analytics & Dashboards



## → Properties:

- Security
- Low latency
- Mobility and continuity



# Gnome Trader

## Location-based AR Trading Game

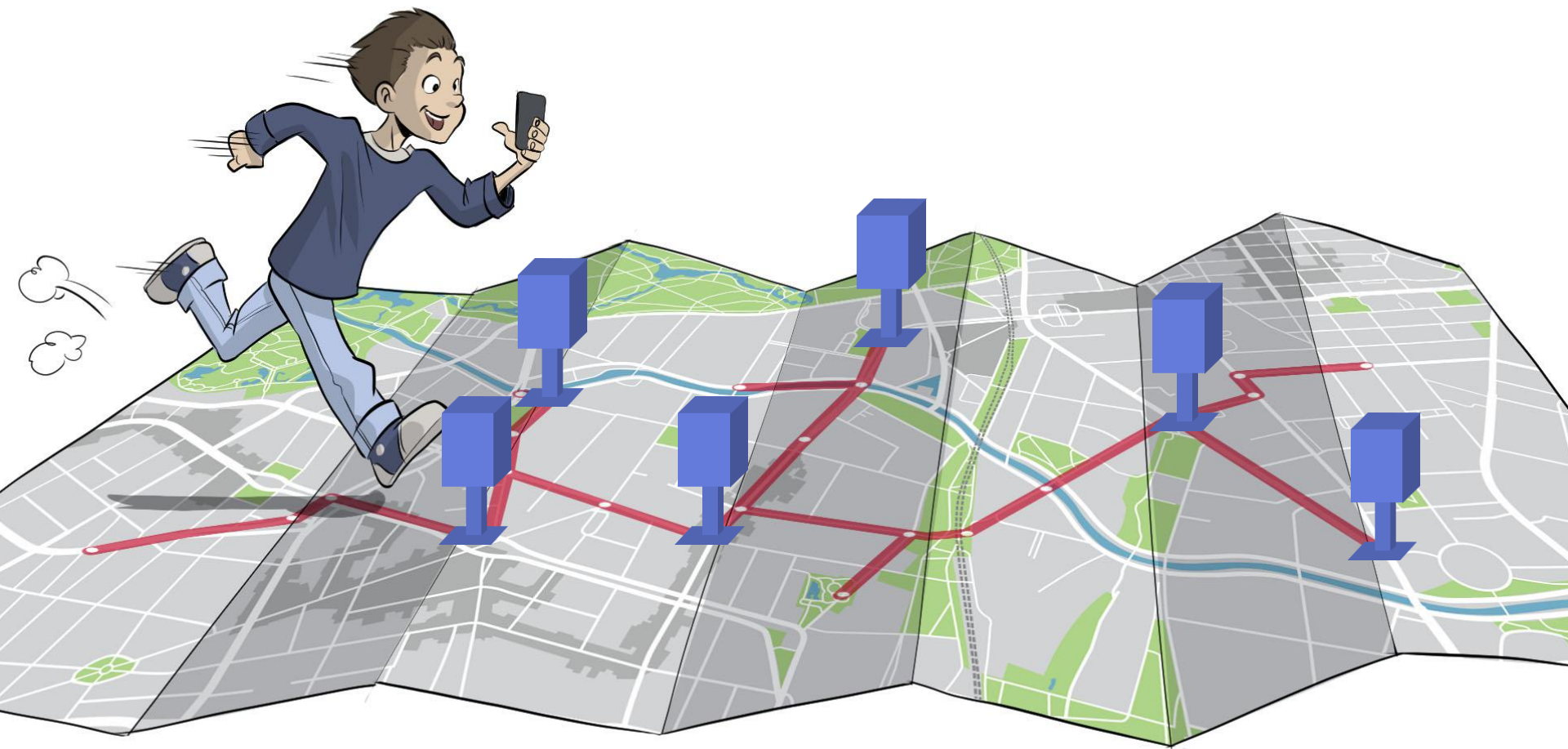


# Augmented Reality



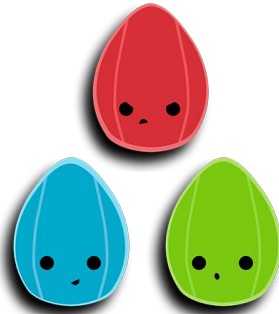
# Augmented Reality





# Gnome Trader - System

Seeds

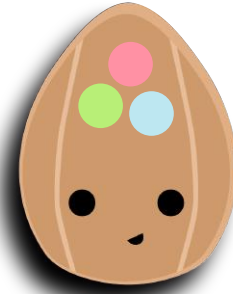


Mathematical rules

Crafting



Seed

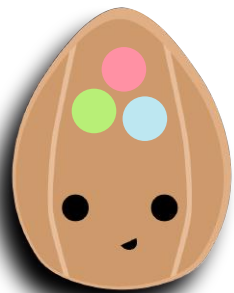


Mathematical rules

*Combination of the  
rules from the parent  
seeds*

# Gnome Trader - System

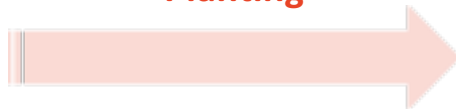
Seed



Mathematical rules

*Combination of the  
rules from the parent  
seeds*

Planting



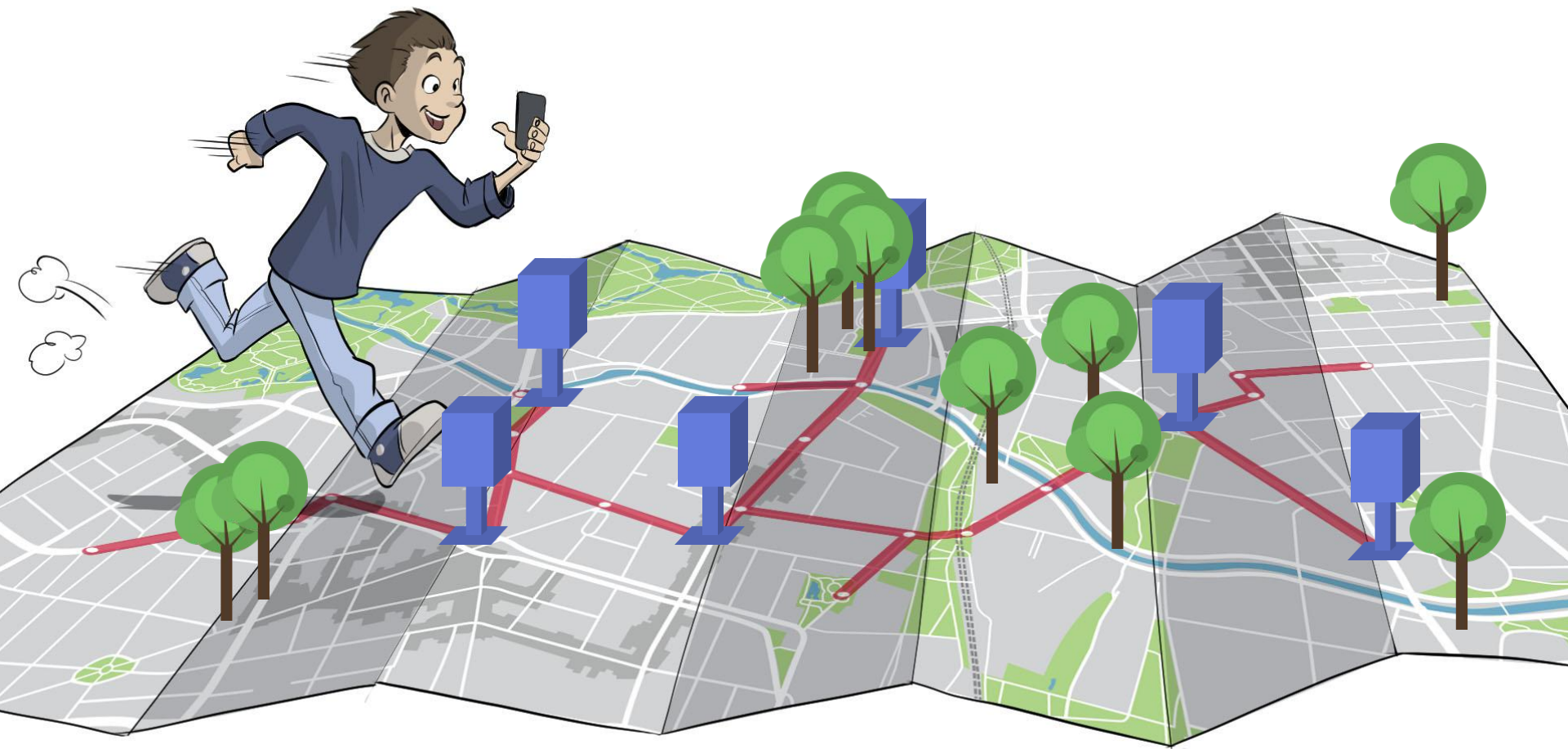
Tree



3D model

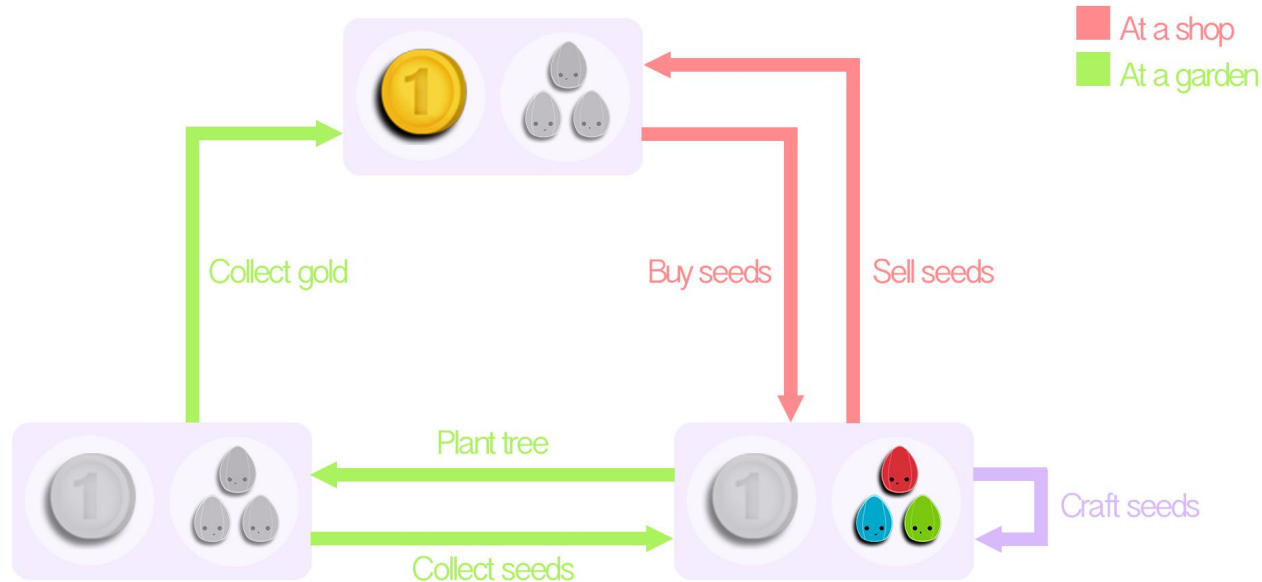
*With visual, growth, and aging  
properties defined by the  
mother seed*





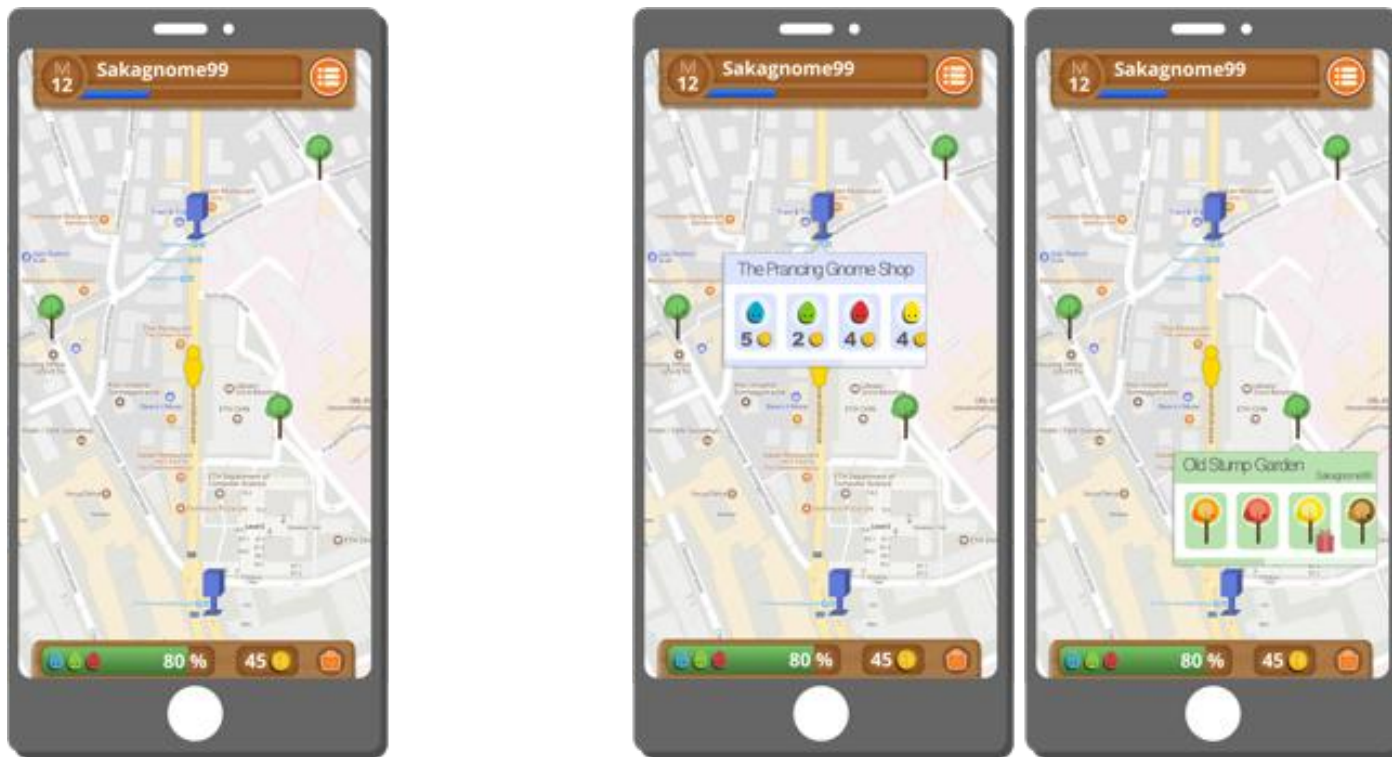
# Gnome Trader - System

- Trading
- Crafting
- Planting





# Citywide gaming



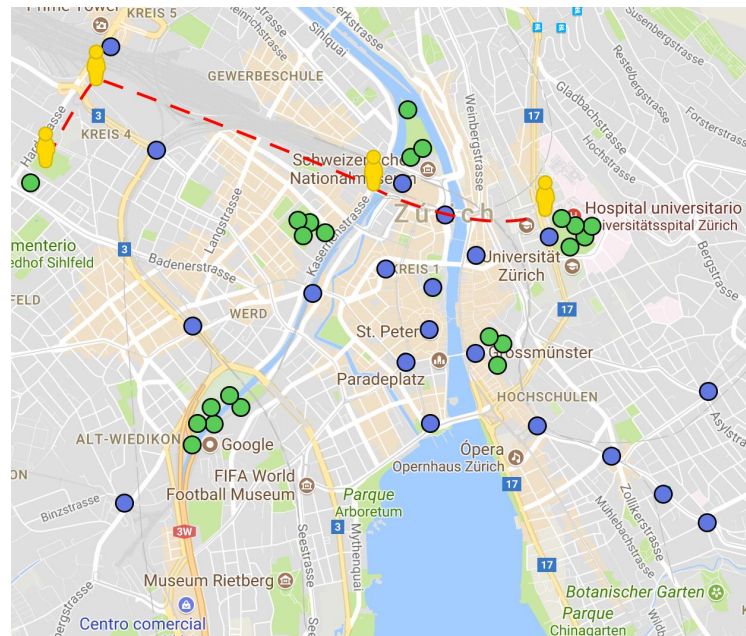


- Personalisation
- Interaction
- Mobility
- Localisation



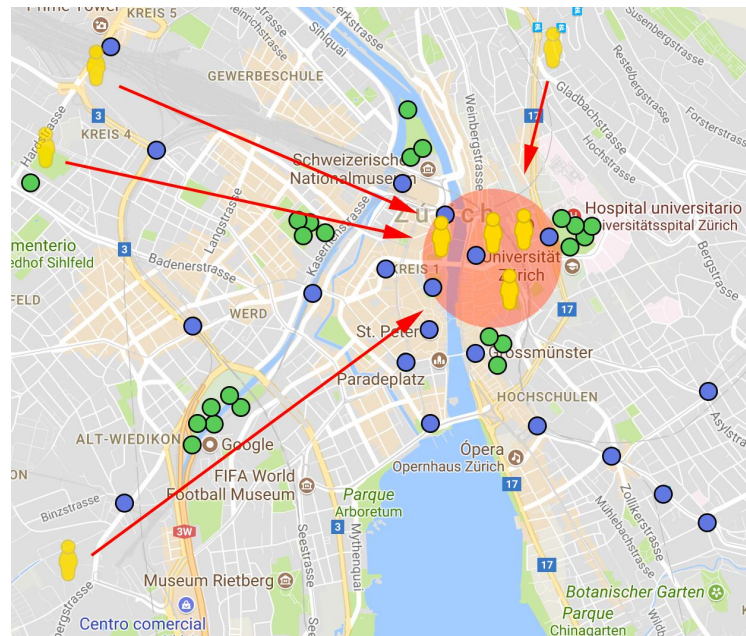


- Citywide interaction



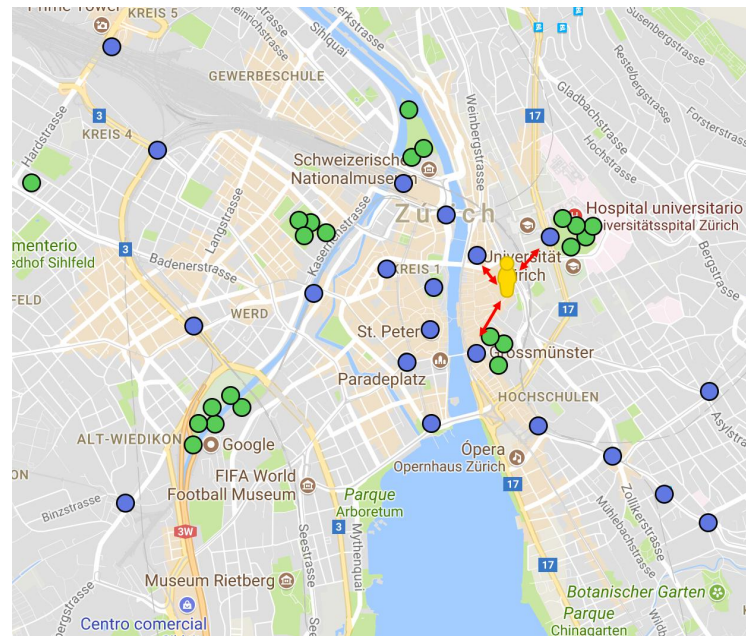


- Citywide interaction
- Multiplayer interaction



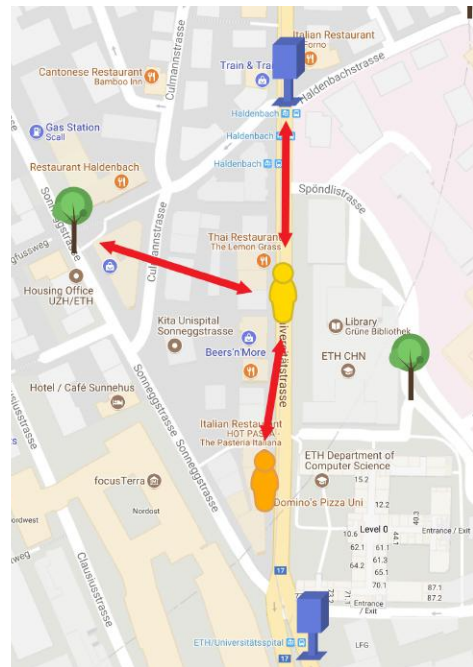


- Citywide interaction
- Multiplayer interaction
- Computational power





- How do people move around the city?
- How do they interact with the game? With the city locations?
- How do they interact with each other?
- How do they benefit from the FLAME platform?
- ...





# FLAME

@EthGtc



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## ETH ZURICH



ICT-FLAME.EU



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