

The background features a vibrant, abstract illustration. It consists of numerous vertical stems in shades of blue, green, and yellow. At the top of these stems are various circular shapes, some solid and some with concentric circles or cutouts, in colors like dark green, light green, blue, and yellow. Interspersed among these are small, stylized flowers with multiple petals. The overall aesthetic is clean, modern, and colorful.

**Genetic algorithms(GA) & video-games**



# Introduction

- GA – brief description
- Balance(game design)
  - Flow theory
  - Run-time
  - Design-time

Your footer comes here



# GA

- Heuristic search
- Boxcar2D
  - Fitness function
  - Process
    - Inicial phase
    - Selection, Mutation
    - Crossover
  - Next generation

# Flow-theory

**Challenge**



**Abilities**

Your footer comes here



# Run-time

- InvAiders
  - Goals
  - GA
  - Results

Your footer comes here





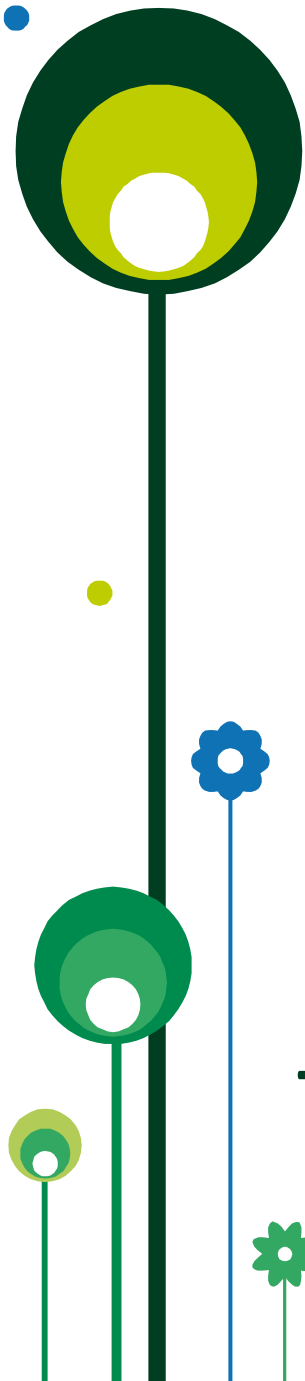
# Design-time

- Towers of Reus
  - Designer tool
- NERO
  - Neuro-evolution



# Conclusions

- Pros
  - Usable on large scale of problems
  - Simple implementation
- Cons
  - Slow
  - Not very well described
    - i.e. lack solid convergence theory
  - Local extremes



Do you have any questions?

Thank you for your attention !