

# RoboGen™

**Robot generation through artificial evolution**  
*Evolutionary Robotics Course Project*

Co-evolving robot bodies and brains

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**Assistants:**

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# Schedule

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## 3 April: Basics of Robogen

- Evolve the brain of cart robot
- Project & Group Formation



## 10 April: Define a body's robot and evolve its brain in Robogen

- Project group should be finalized: Send us an email with your team member names and their SCIPER numbers
- During the week you will define your project idea



## 17 April: Evolve Body-Brain and Information on Robot fabrication

- Learn to evolve body + brain
- Informal discussion of your team project idea with TAs



## 1 May: Project Hands-on (1 hour)

- Projects discussion with course assistants
- Continue working on projects out of class



## 8 May: Intermediate Presentation

# Evaluation

The evaluation will be based on

- A short intermediate presentation on 8<sup>th</sup> May. At this time you should be able to demonstrate what you have accomplished so far including a demonstration of your best evolved robot(s) in simulation.
- A final presentation on 31<sup>st</sup> May summarizing your project and presenting a live demo of your evolved, 3D printed robot. The presentation will be based on a template we will provide. The presentation will document your work, your methods, your results and analysis (hint: performing repetitions of your experiments in order to conduct a statistical analysis is strongly encouraged!)

**The results you obtain + creativity + task difficulty + demonstration of a rigorous scientific approach + clarity and completeness of your presentations will all influence your final grade.**