#### Portfolio

Dr. Stéphane Magnenat

I am an academic researcher, software engineer, game designer and entrepreneur. This document presents my contributions to the field of video games, experimental movies, and technological art installations.

## AR Coloring book

While at Disney Research Zürich, I led the creation of an augmented reality coloring book app.

The resulting research paper received the second best paper award at the ISMAR 2015 international conference and the video of the work has 742k views on YouTube.

The team was composed of Maurizio Nitti and Alessia Mara, digital artists, Dat Tien Ngo, researcher, Mattia Ryffel and Gerhard Röthlin, software engineers.





### Thymio Programming Adventure

During the year 2015–2016, I led a small inter-disciplinary team working on an augmented reality programming adventure.

The resulting prototype integrates mobile robotics with augmented reality and enables a new level of interaction in the field of computer science education using mobile robots.

The team was composed of Maria Beltran, designer, Ramiz Morina, digital artist, and Martin Voelkle, software engineer.



### Globulation 2

Globulation 2 is an innovative real-time strategy game which reduces micro-management by automatically assigning tasks to units through artificial intelligence.

It is open source and provides multi-player gaming through Internet.

I am the co-initiator of the project with Luc-Olivier de Charrière, core game designer and software engineer, and was project leader from 2001 to 2006. The team consisted of Bradley Arsenault, Leo Wanderselbe, Dr. Emmanuel Eckard, Dr. Cyrille Dunant and other contributors.

Globulation 2 is available on Windows, macOS and bundled in most Linux distributions.

1998-2006 globulation2.org



#### SnakeMe

SnakeMe is a highly-customizable open-source snake game.

I am the initiator of the project and software engineer, and led a team of three people designing levels and artworks.

SnakeMe is available on Windows, macOS and Linux.

1998 project web site





### Thymio Visual Programming Language

In collaboration with Dr. Jiwon Shin and Maria Beltran, I created an interactive visual programming language for the Thymio educational mobile robot.

More than 25k robots using this language have been sold and half of them are used in schools in France and Switzerland.



## Discover stem cells science with robots

In collaboration with Dr. Elisa Laurenti of the University of Cambridge, I designed an interactive installation for children to learn about stem cells science by programming the Thymio mobile robot.



## Transfer, le film

Transfer is a set of two experimental short movies on the work of craftsmen.

In these movies made with Dr. Basilio Noris and Jacques-Paul Grivaz, I was responsible for the editing and contributed to the shooting.





## Reactive moving structure

In collaboration with artist Aparna Rao, I led the technical design and the prototyping of an interactive art installation by my student Marcel Flügel.





### Pas de deux in green

In collaboration with artist Aline Veillat, I led the design and the implementation of a plant cyborg robot by my student Janine Stocker.



# Tangible exploration of sound

With my student Matthias Bloch, we explored how one can physically shape sound by assembling blocks of wood.

