



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

# Lecture with Computer Exercises: Modelling and Simulating Social Systems

Project Report

## **Vector based navigation of desert ants**

Josua Graf, Noah Zarro

Zurich  
Dec 2018

## **Agreement for free-download**

We hereby agree to make our source code for this project freely available for download from the web pages of COSS. Furthermore, we assure that all source code is written by ourselves and is not violating any copyright restrictions.

Josua Graf

Noah Zarro

## Contents

1	Abstract	4
2	Individual contributions	4
3	Introduction and Motivations	4
4	Description of the Model	4
5	Implementation	4
6	Simulation Results and Discussion	4
7	Summary and Outlook	4
8	References	4

## 1 Abstract

```
import numpy as np

# show numbers 0-9
print ('Numbers from 0-9')
for i in range(10):
    print(i)
```

## 2 Individual contributions

## 3 Introduction and Motivations

## 4 Description of the Model

## 5 Implementation

## 6 Simulation Results and Discussion

## 7 Summary and Outlook

## 8 References