

Lecture with Computer Exercises:

Modelling and Simulating Social Systems with Python

Project Report

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| Simulation of the Intersection between Tannenstrasse and Universitätsstrasse with traffic lights |

Nico Burger, Leo Fent, Jérôme Landtwig & Pascal Lieberherr

Zürich,  
 December 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 the SOMS chair. Furthermore, we assure that all source code is written by ourselves and is not violating any copyright restrictions.

Nico Burger Leo Fent Jérôme Landtwig Pascal Lieberherr

.... Declaration of Originality needs to be added

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# Instructions for our group

# To make a main Title

Select "Überschrift 1" in templates

## Making a small title…

Just use "Überschrift 2"

### For an even smaller title

Use "Überschrift 3"

If you want to insert an image, insert it and then right click on it to add a description. It should look as follows:



Figure 1: This is a graph

If you'd like to insert code, past the code and then select the format "Code" this will make it look like that:

This is some code for you. It will be in this format with a neat little box around it.

Do whatever you like with it.

# Abstract

Pascal

Authors: Nico Burger, Leo Fent, Jérôme Landtwig, Pascal Lieberherr

Title: Implementation of a traffic light system at the intersection between Tannen- and Universitätsstrasse

# Individual contributions

Pascal

Introduction and Motivation

Pascal’s JOB!!

## Motivation

Wir überqueren selbst die Kreuzung täglich in den Pausen.

Beobachtungen: Stau für Autos wenn Pause zwischen Lektionen

Haben uns gefragt ob, ein Ampelsystem die Situation für Fussgänger und Autofahrer verbessern könnte?

## Fundamental Questions

Do traffic light show an improvement for ped and cars

.. in terms of waiting time for both cars and ped -> shorter car queue?

## Expected Results

# Description of the Model

Kapitel das von Leo und Nico bearbeitet wird

Waiting time is classified based on the length of the queue

AGENTS

Nico

Path

ITERACTION

Nico

GRAPHICAL OUTPUT

Leo

# Implementation

Leo und Nico

# Performed simulations

Jérôme

Hinweis: Der Leitfaden für unsere Arbeit ist die Arbeit «Pedestrian Dynamics in narrow, long hallways» Link: https://github.com/ratheile/MSSSM

Welche Parameter wurden bei der Simulation verwendet?

Verschiedene Simulationen auflisten und entsprechende Diagramme einfügen

Neue Diagramme mit neuen Parmeter benennen/beschreiben-

Ziel: Es soll für uns ersichtlich sein welche Situationen simuliert wurden und was die Parameter sind.

# Simulation Results and Discussion

## Summary and Outlook

# Python source Code

Python code will be here