PhD Thesis

Foundations of Pure Functional Agent-Based Simulation

Jonathan Thaler (4276122)
jonathan.thaler@nottingham.ac.uk

supervised by
Dr. Peer-Olaf Siebers
Dr. Thorsten Altenkirch

March 5, 2018

Abstract

TODO

Contents

0.1 Introduction 3

1 Part I: General Concepts **4**

2 Part II: Pure functional ABS **5**

3 Part III: Dependent types in ABS **6**

4 Conclusions **7**

0.1 Introduction

first year report, FpOOPAbs report,

Part I: General Concepts

FpOOPAbs report, abs defined, pure functional programming defined, artiterating paper, towards pure functional paper

Chapter 1

Part II: Pure functional ABS

concepts of time- and event-driven approach in haskell FrABS report, pure functional epidemics paper additional research on event-driven approach in haskell: unscheduling events in functional style easy: rollback to previous state is easy but memory costly. look into that in the thesis applicability of UML and peers Framework to pure functional ABS

Chapter 2

Part III: Dependent types in ABS

3rd paper

Chapter 3

Conclusions

Bibliography