

JONATHAN GRAY

PhD
Researcher

j.gray@soton.ac.uk
07528-843-417

Skills

Python	HPC	R
Java	SQL	LaTeX
Statistics	Agent-based modelling	Simulation
Decision theory	Associative learning	Risk

Education

Institute of Complex Systems Simulation, University of Southampton
PhD Complex Systems Simulation and Social Statistics **2012-current**

City University, London
BSc Computer Science with Artificial Intelligence, 1st **2009-2012**

Publications

J Gray, J Bijak, S Bullock. Deciding to Disclose: A Decision Theoretic Agent Model of Pregnancy and Alcohol Misuse. In J. Van Bavel & A. Grow (Eds.), Agent-based modeling in population studies: Concepts, methods, and applications. Dordrecht: Springer. (Forthcoming)

E Mondragón, J Gray, E Alonso, C Bonardi, D Jennings. SSCC TD: A Serial and Simultaneous Configural-Cue Compound Stimuli Representation for Temporal Difference Learning. PLoS ONE 9 (7), e102469

E Mondragón, J Gray, E Alonso. A complete serial compound temporal difference simulator for compound stimuli, configural cues and context representation. Neuroinformatics 11 (2), 259-261

E Mondragón, E Alonso, A Fernández, J Gray. An extension of the Rescorla and Wagner Simulator for context conditioning. Computer methods and programs in biomedicine 110 (2), 226-230

Presentations 2015

The Risky Business of Asking for Help: an ABM of unmet need in older adults (BSPS, SCCS)

Deciding to Disclose: Pregnancy & Alcohol Misuse (IC2S2)

2014

Decision Making in ABM: Agents with Agency (MPIDR Rostock, invited talk)

Deciding to Disclose: Pregnancy & Alcohol Misuse (SCCS)

Software

GEM Utils

A small collection of python utilities for working with the Gaussian emulation machines, and interfacing with FORTRAN95 emulators.

<https://github.com/greenape/gem-module>

PBS-Bullet

A python module for monitoring, reporting, and control of code runs in HPC environments, with Pushbullet integration.

https://github.com/greenape/pbs_bullet

SSCC Temporal Difference Simulator

Java simulator for an extension to the Temporal Difference model, addressing serial compounds of stimuli.

<https://github.com/cal-r/sscctd>

Temporal Difference Simulator

Java simulator for the Temporal Difference model of associative conditioning.

<https://github.com/cal-r/td>

Experience

Communications International Group

Technical Support

2010-2012

Responsibilities: Troubleshooting PC & mac issues, liaising with third party contractors, server management, user training.

Skills Needed: OSX, Server 2003/AD, teamwork, expectation management, time management, personal interaction/training & support, Exchange 2003, iPhone.

Achievements/Improvements made: Part of team delivering integrated OSX/Windows system, deployment of WiFi coverage for offices, introduction of automated maintenance systems, training of users in best practices and use of the Outlook calendaring system, setup of push mail to iPhones using Exchange ActiveSync.

Jonathan Gray — j.gray@soton.ac.uk — 07528-843-417 — <https://github.com/greenape>
