

WHIT SCHONBEIN

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EDUCATION

MS Computer Science (GPA 3.91) <i>University of New Mexico, Albuquerque, New Mexico</i>	2016
PhD Philosophy-Neuroscience-Psychology (GPA 3.842) <i>Washington University, St. Louis, Missouri</i>	2002
BA (dual) Computer Science, Philosophy (GPA 3.408) <i>University of Wisconsin, Madison, Wisconsin</i>	1994

SKILLS

Computational: C, C++, Fortran, OpenMP, MPI, Linux, Java, Haskell, LaTeX, Qt, SLURM, PBS/Torque

Instructional: Course design, technical presentation.

CAREER HISTORY

R&D Intern <i>Center for Computational Research, Sandia National Laboratories</i>	2017-present
<ul style="list-style-type: none">• Conducting research on optimizations for MPI.	
Research Assistant , <i>Department of Computer Science, University of New Mexico</i>	2013 - 2017
<ul style="list-style-type: none">• Developed test suites for C, C++, and Fortran Cray Compiler Environment support for OpenMP 4.0 and 4.5 features.• Developed test suite for MPI 3.0 tools interface.• Investigated the performance of tree-based overlay communication networks in HPC environments.• Investigated opportunities for energy savings involving non-blocking MPI collective operations.	
Assistant Professor , <i>Department of Philosophy, College of Charleston</i>	2007 - 2012
<ul style="list-style-type: none">• Designed and taught courses on logic, artificial intelligence, cognitive science, philosophy of language, Western civilization, and other topics.• Published research on topics at the intersection of computational theory and philosophy of mind.• Designed and supervised undergraduate internship program.• Served on tenure track hiring, internal grant review, instructional technology, and arts & sciences writing committees.	

OTHER PROJECTS

microwork

- A collection of high-precision, inline busy-wait loops for modeling workload latency in benchmarks.
<https://github.com/whit-schonbein/microwork>

insect_decision

- A collection of numerical approximations of dynamical models of binary nest selection in social insects, along with a GUI for visualizing the results of varying parameters.
https://github.com/whit-schonbein/insect_decision

modbussim

- A PLC simulation for exploring vulnerabilities in the modbus protocol.
<https://github.com/whit-schonbein/modbussim>

SELECTED PUBLICATIONS

Schonbein, W., (2014) 'Varieties of analog and digital representation', *Minds & Machines*, DOI 10.1007/s11023-014-9342-x

Schonbein, W., (2012) 'Inspirational anchors: minimal computational models in cognitive science', *Journal of Experimental & Theoretical Artificial Intelligence*. 24 (3): 385-400.

AWARDS AND SERVICE

Reviewer *Synthese, Minds & Machines, Philosophical Psychology* *ongoing*
Officer Computer Science Graduate Student Association at UNM *2015-2016*
EXCEL-2011 School of Humanities and Social Sciences EXCEL Outstanding Faculty Member of the Year,
College of Charleston, 2010-2011 *2011*

REFERENCES

On request.