CLAYTON STANLEY

Bloomberg LP ◇ New York, NY
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EDUCATION

Rice University *Dec 2014*
Ph.D., Cognitive Psychology, emphasis in modeling large-scale human behavioral datasets
Thesis short title: Comparing vector-based and ACT-R memory models using large-scale datasets
Advisor: Dr. Michael D. Byrne, Overall GPA: 3.9

Rice University *May 2009*
M.A., Cognitive Psychology, emphasis in computational cognitive modeling
Thesis title: Visual displays: Developing a computational model explaining the Global Effect
Advisor: Dr. Michael D. Byrne, Overall GPA: 3.8

United States Air Force Academy *May 2007*
B.S., Applied Physics, emphasis in computational methods
Distinguished Graduate, Overall GPA: 3.8

AWARDS

· John W. Gardner Award, Best dissertation in the social sciences, Rice University *May 2015*
· United States Air Force Commendation Medal for exceptional leadership *May 2012*
· Kenneth R. Laughery Award, Best masters thesis in psychology, Rice University *May 2009*
· Outstanding cadet in applied physics, United States Air Force Academy *May 2007*
· Won cadet inter-service computer programming competition, USAFA *May 2007*

EXPERIENCE

Bloomberg LP, UX Design Jan 2015 - Present
UX Data Scientist *New York, NY*

· Uncovering insights from user log data to improve the design of the Terminal.
· Working with engineering to build a centralized analytics platform.
· Working with engineering to improve and expand current instrumentation.
· Working with engineering to improve self-service analytics tools for designers and product managers.
· Working with user experience researchers to design and analyze quantitative experimental studies.

Rice University, Computer Human Interaction Laboratory Aug 2012 - Dec 2014
Graduate Research Assistant *Houston, TX*

· Evaluated and improved declarative memory models using large-scale behavioral datasets. Explored Bayesian and vector-based tag classifiers to predict user-generated tags on StackOverflow and Twitter.

Rice University, Computer Human Interaction Laboratory May 2012 - Aug 2012
Research Programmer *Houston, TX*

· Migrated 50K lines of Macintosh Common Lisp (MCL) GUI code to Clozure Common Lisp (CCL). Implemented subset of the MCL GUI specification in CCL, so that CCL could run original MCL code.
· Consequently, provided a 10-100x speedup in code run time, and allowed modelers to use the newest OS X operating system and improved IDEs during development.

Air Force Research Laboratory, Cognitive Models and Agents May 2009 - May 2012
Cognitive Scientist and Software Engineer *Dayton, OH*

· Enabled Teraflops of free computing power for the AF. Developer for the net-centric MindModeling volunteer computing research project. Part of core dev team that redesigned and reimplemented the entire system between 2010-2011. Systems-level project. 10,000+ SLOC. 10+ programming languages.
· Led first organization in AFRL headquarters to certify and connect to the Defense Research Engineering Network (DREN).
· Wrote a system-hardening tool for Linux and OS X to certify machines for the DREN.

Rice University, Computer Human Interaction Laboratory May 2007 - May 2009
Graduate Research Assistant *Houston, TX*

· Improved and validated a cognitively-plausible and computationally-efficient theory of visual search, and implemented the model in the ACT-R cognitive architecture.

United States Air Force Academy, Department of Physics May 2006 - May 2007
Undergraduate Research Assistant *Colorado Springs, CO*

· Researched, redesigned, and reimplemented a parallelized lightcurve inversion program developed in Matlab. Successfully ported and run on Hoku (Cray XD-1 Linux system), located at MHPCC.

MEMBERSHIP & SERVICE

· Active contributor to StackOverflow community *Jun 2011 - Present*
· US Air Force Active-Duty Commissioned Officer *30 May 2007 - 31 May 2012*

TECHNICAL STRENGTHS

Behavioral/Physical Modeling	mathematical, statistical, cognitive simulations using Atomic Components of Thought-Rational (ACT-R)
Relevant Coursework	*Statistics*: logistic/linear/nonlinear/multivariate regression *Mathematics*: partial differential equations, discrete math *Psych*: engineering psychology, human factors, decision making *CS*: artificial intelligence, programming paradigms
Computer Languages	R, bash, make, SQL, common lisp
Programming Paradigms	macros, anaphoric/read/compile macros, DSL programming, closures, object oriented, functional, imperative, declarative, code parallelization, vectorization, and optimization
HPC Technologies	hadoop, hive, splunk, postgres, DOD supercomputers
Tools	linux, docker, git, vim, data.table, python
Visualization Tools	ggplot2, tableau, d3
Team Processes	agile, scrum, daily standups, retrospectives, code reviews, bug tracking, pair debugging, test-driven development