Keiland W. Cooper

⊕ kwcooper.xyz | ▼ @keilandwcooper | @ kwcooper@uci.edu | ⌂ kwcooper

Last updated Feb 22, 2020

Education

University of California, Irvine **In progress**
Neuroscience, Ph.D.

Indiana University, Bloomington **May the fourth, 2019**
Cognitive Science B.S. *with Honors*; Neuroscience Cert.
Thesis: Cholanergic mode switching

Experience

Contractor Developer / Designer **2014–Present**
Hybrid app UI for a cool home automation system (AngularJS/Ionic), Switched to full stack (MongoDB/ExpressJS/AngularJS/Node.js + Ionic), Built a CRM and an inventory system in 8 months (full stack, LAMP), Developed an in-browser QR code PDF generator and QR code scanner (JavaScript), Built and deployed a sitemap with 150 million URLs (Python), Full redesign of CI for Murat Diril, produced full advertisement package (print).

Lead Designer / Web Developer **2007–2014**
Developed (both frontend and backend) websites/services based on Wordpress/Contao, Built a job board (full stack, LAMP), Designed CI's, posters, flyers, catalogues, business cards etc.

Contractor Designer / Jr. Project Manager / Web Developer **2012–2014**
Developed an analytics tool and a UI for a project (2000+ users as of Oct.2014).

Internship (Research) **2010**
Lazer path optimization using pythagorean-hodograph curves in R^4, Disproved given hypothesis and two of its generalized versions.

Scientific Assistant / Student Tutor / Programmer **2006–2010**
Proposed an algorithm for real-time matching of filmed objects with their 3D-models, Implemented several real-time pattern recognition and triangulation algorithms, Optimized image-recognition code so that it could be used in real-time video analysis, Implemented several sheduling algorithms and a GUI for their usage (J2EE + Swing), Tutored a lecture in cryptography, corrected students homework, Voluntarily gave a sneak peak into Zero-Knowledge Proofs and PCP Proofs to the students, Also did some boring stuff: wrote TYPO3 modules.

Research

Extensive Form$^+$: Describing Games Linear Nature (Diploma Thesis, 52 pages) **2010-2011**
Studied games with betting structures present in Poker. Proposed a new way to describe such structures, a strategy space and a set of equilibria on it. Proved the existence of such equilibria for finite Extensive Form$^+$ games satisfying perfect recall. Submitted in 2011.

Theta modulation
Studied games with betting structures present in Poker. Proposed a new way to describe such structures, a strategy space and a set of equilibria on it. Proved the existence of such equilibria for finite Extensive Form$^+$ games satisfying perfect recall. Submitted in 2011.

Publications

Preprints

pre, J. J. H., Cooper, K. W., and Newman, E. L. (2019). Medial entorhinal cortex activates in a traveling wave. BioRxiv, 632109.

Published

pub, J. J. H., Cooper, K. W., and Newman, E. L. (2019). Medial entorhinal cortex activates in a traveling wave. BioRxiv, 632109.

pub, J. J. H., Cooper, K. W., and Newman, E. L. (2019). Medial entorhinal cortex activates in a traveling wave. BioRxiv, 632109.

Abstracts

abs, J. J. H., Cooper, K. W., and Newman, E. L. (2019). Medial entorhinal cortex activates in a traveling wave. BioRxiv, 632109.

abs, J. J. H., Cooper, K. W., and Newman, E. L. (2019). Medial entorhinal cortex activates in a traveling wave. BioRxiv, 632109.

Awards

National Science Foundation, GRFP: *Honorable Mention*	2019
Indiana University Cognitive Science Outstanding Research Award	2018
Ewing Prize	2018

Networks

Professional Societies

Indiana Academy of Science

Psi Chi

Other

Continual AI

Conference Committee

Learning: Fast, Deep, and Shallow

Pedagogy & Higher Education

Undergraduate Co-Instructor

Autonomous Robotics (CSCI-B355); Spring 2019

Programming in the Cognitive and Info Sciences (COGS-Q 260); Spring 2018

Undergraduate Teaching Assistant

Cognitive Psychology (PSY-P 355); Fall 2018

Committee Seats

Education Policy Committee; Indiana University

Faculty Council; Indiana University

Skillset

Laboratory	JavaScript, Python, PHP
Computational	Node.js/ExpressJS/AngularJS/React/d3.js, Python/PHP, MySQL/MongoDB, Git
IT	js/jQuery, PHP, MySQL, Wordpress/Contao
Teamwork	Git, Linux, Slack/Hipchat, Asana/Pivotal Tracker, Dropbox/Evernote/Trello/Google Docs
Design	Adobe Creative Suite

Outreach & Service

Hoosier Stars (co-founding Director)
Brain Club @ The Boys and Girls Club
Quora Top Writer

Trainings, Workshops, etc.

Nonlinear dynamics at the santa fe institute
Complexity Science, santa fe institute
Science Communication workshop, Indiana University

Press

Keiland went and did outreach somewhere (2018)
The art of dissemination part 3: Care to share?
Science Communication workshop, Indiana University

Erdos Number: 5

Paul Erdos -> Ronald L. Graham -> Feng Zhou -> Mike -> Ehren -> Me

Who Am I?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec a diam lectus.

JavaScript
PHP
SASS/LESS
Bootstrap
Git
LaTeX

Eclipse   git   Office   Inkscape   Blender