WILL MCFADDEN

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EDUCATION

University of Chicago   *exp. Sept 2016*
Ph.D. in Biophysical Science with certificate in University Teaching
Thesis: *Computational models of filament recycling in active networks*

University of Illinois at Urbana-Champaign   *Dec 2009*
B.S. in Engineering Physics with minors in Mathematics and Computer Science

SKILLS

Languages, Packages, & APIs   Java, MATLAB, Python, JS, LaTeX, pandas, sklearn, git, Arduino, D3

RESEARCH EXPERIENCE

University of Chicago, Research Computing Center   Apr 2015 - Present
Graduate Research Assistant   *rcc.uchicago.edu*
· Analyzed SLURM scheduled supercomputer power usage to optimize datacenter energy saving strategies
· Published and presented measurement techniques and python analysis pipeline at international conference

University of Chicago, Munro Research Group   Aug 2011 - Present
Ph.D. Research Assistant   *munrolab.bsd.uchicago.edu*
· Devised statistical methods for novel single-molecule measurement techniques and published results
· Collaborated with experimentalists to build computational models of biological systems in Java and MATLAB

TEACHING AND LEADERSHIP

Artifice Tech Education, NFP   Jan 2014 - Present
Instructor, Curriculum Developer, CTO   *www.artificechicago.org*
· Launched initiative to expand 3 new schools and aided recruiting efforts to quadruple our volunteer staff
· Led development team in building tech curriculum, administrating operations, and expanding outreach efforts

SOFTWARE DEVELOPMENT

University of Chicago, Shah Research Group   Mar 2015 - Jan 2016
Software Developer   *theslab.uchicago.edu/anuj/*
· Developed custom online scientific web surveys, databases, and data processing in HTML, JS, and PHP

Institute for Genomic Biology, Robinson Research Group   Oct 2009 - May 2010
Computational Research Assistant   *www.life.illinois.edu/robinson*
· Built automated video data collection system and data analysis pipeline in MATLAB and python

National Center for Supercomputing Applications, ISDA Research Group   Jun 2008 - Jun 2009
Research Programmer   *isda.ncsa.illinois.edu*
· Developed machine vision software for large volume electronic document appraisal in Java

LIFE ACHIEVEMENTS

Played House of Blues; Gave best man's speech; Hitchhiked to California; Biked from Illinois to Atlantic