

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 & Markup

Java, MATLAB, Python, JS, bash, perl, SQL, CSS, HTML, LaTeX

Protocols, Frameworks, APIs

MPI, Hadoop, GAE, AWS, Arduino, Bluetooth, D3, JSON, GMaps

Packages & Software Tools

scipy, pandas, sklearn, IPython, git, AutoCAD, Inkscape, WordPress

EXPERIENCE

University of Chicago, Research Computing Center

Apr 2015 - Present

Research Assistant

Chicago, IL

- Analyzed supercomputer power usage to optimize datacenter energy saving strategies
- Published and presented measurement techniques and analysis pipeline at international conference

Artifice Tech Education

Jan 2014 - Present

CTO and Board Secretary

Chicago, IL

- Managed volunteer instructors and aided recruiting efforts to quadruple our volunteer staff
- Led development team in administrating internal operations and expanding public relations efforts

University of Chicago, Munro Research Group

Aug 2011 - Present

Ph.D. Research Assistant

Chicago, IL

- Devised statistical methods for novel single-molecule measurement techniques and published results
- Collaborated with experimentalists to build computational models of active biopolymer materials
- Mentored incoming graduate students in data analysis and computational modeling

Bionic Trader Systems

Sep 2011 - Dec 2012

Software QA Consultant

Chicago, IL

- Advised on user experience and stress testing of financial trading software

Institute for Genomic Biology, Robinson Research Group

Oct 2009 - May 2010

Computational Research Assistant

Urbana, IL

- Built automated video data collection system and data analysis pipeline

National Center for Supercomputing Applications, ISDA Research Group

Jun 2008 - Jun 2009

Research Programmer

Urbana, IL

- Developed machine vision software for large volume electronic document appraisal

LIFE ACHIEVEMENTS

Survived day without water in a desert slot canyon; Played the House of Blues; Gave best man's speech; Hitchhiked to California; Wrote rock opera; Fasted for three days; Biked from Illinois to the Atlantic;