AJ051
949 E. 58th St.
Chicago, IL 60637
708.374.7435
773.834.5198
rishel@uchicago.edu
http://chrisrishel.com/

Chris Rishel

Education

2007–Present **M.D. Candidate**, *Pritzker School of Medicine at The University of Chicago*, *N/A*.

2007–Present **Ph.D. Candidate**, *The Committee on Computational Neuroscience at The University of Chicago*, 3.85/4.00.

2003–2007 **B.S. in Computer Science**, *The College of Engineering at The University of Illinois at Urbana-Champaign*, 3.80/4.00.
Graduated with Highest Honors

2003–2007 **B.S. in Chemistry**, *The College of Liberal Arts & Sciences at The University of Illinois at Urbana-Champaign*, 3.80/4.00.
Graduated Cum Laude

Work Experience

Research

2008–Present **Graduate Student**, *Laboratory of David J. Freedman*, The University of Chicago.
My primary research interest involves investigating how visual short-term memory is encoded, stored, and used to perform cognitive tasks. While it has been known for some time that "higher order" brain areas such as pre-frontal cortex show memory-like activity, recent studies have revealed that earlier processing areas such as the lateral intraparietal area and area 7a (which are traditionally thought to be involved with more basic visual, spatial, and motor processing) display strong selectivity for more cognitive computations such as attention, categorization, matching, pairing, etc. The possibility exists that these brain areas are responsible for (or at least participate in) maintaining the availability of the significance of recent visual stimuli. Alternatively, these areas could be receiving this input from elsewhere, and are using it for other unknown computations. My current project seeks to investigate the function of, and conditions under which, these areas exhibit this more cognitive behavior.

2004–2007 **Lead Developer**, *The University of Illinois Archives*, The University of Illinois at Urbana-Champaign.
Worked for The University Archives as the founding/lead developer on the award-winning *Archon Project*. Archon was developed to be an open-source, flexible, intuitive content management system to allow archival institutions to make information about their collections readily available to researchers through any web browser.
• **$100,000 Winner**, *2008 Mellon Award for Technology Collaboration*

Vocational

2003–2007 **Systems Administrator**, *The University of Illinois Bands*, Champaign, IL.
Responsible for assuring the integrity and functionality of all servers and personal computers on the department's network. Consulted with staff to design solutions to advance the department's technical resources and oversaw their implementation.

2000–2003 **Senior Web Developer**, *Motion Internet/Hanson Information Systems*, Springfield, IL.
Responsible for developing robust web applications for both client websites and internal use.

Teaching Experience

Winter 2008 **Teaching Assistant**, *Mathematical and Statistical Methods for Neuroscience II*, The University of Chicago, prof. Wim Van Drongelen.
Similar duties to the fall quarter course.

Fall 2008 **Teaching Assistant**, *Mathematical and Statistical Methods for Neuroscience I*, The University of Chicago, prof. Wim Van Drongelen.
Duties included grading homeworks, running weekly discussion sections, giving one lecture, running one lab session, grading two take-home exams, and designing a problem for the take-home final exam which required students to filter, detect, and sort spikes from a time series containing multiunit data.

2006–2007 **MCAT Teacher**, *Kaplan*, Champaign, IL.
Responsible for teaching two to three three-hour classes per week, as well as providing out-of-class help to prepare students to excel on the MCAT (Medical College Admission Test).

Computer skills

Programming Languages: ASP, C, C++, CSS, HTML, Java, JavaScript, Mathematica, MATLAB, MIPS Assembly, OCAML, PHP, Perl, Verilog, Visual Basic

Operating Systems: DOS, Linux, Mac OS, Mac OS X, Solaris, Windows, Windows Server

Database Platforms: Microsoft SQL Server, MySQL, PostgreSQL

Publications

Rishel, C. A. and Freedman, D. J. The Influence of Saccades on Visual Feature Selectivity in Parietal Cortex During a Visual Matching Task. In *Society for Neuroscience Abstracts 2010*, (2010).

Swaminathan, S. K., McClellan, S., Rishel, C. A., and Freedman, D. J. A Comparison of Prefrontal and Parietal Cortices During Visual Motion Categorization. In *Society for Neuroscience Abstracts 2009*, (2009).

Schwartz, S. W., Prom, C. J., Rishel, C. A., and Fox, K. J. Archon: A Unified Information Storage and Retrieval System for Lone Archivists, Special Collections Librarians and Curators. *Partnership: The Canadian Journal of Library and Information Practice and Research* 2(2) (2007).

Prom, C. J., Rishel, C. A., Schwartz, S. W., and Fox, K. J. A Unified Platform for Archival Description and Access. In *International Conference on Digital Libraries, Proceedings of the 7th ACM/IEEE-CS joint conference on Digital Libraries*, 157–166. ACM, (2007).