Curriculum Vitae

Charles-Antoine Julien

Assistant Professor School of Information Studies McGill University

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(Fluent in French and English)

Education

Post-Doctoral Fellow: Jan. 2011 - Dec. 2011

School of Information Studies, University of Wisconsin in Milwaukee. Bridges between Information Organization and Information Retrieval, Analysis of MeSH Supervisor: Dr. Hur-li Lee

PhD of Information Studies: 2005-2011

School of Information Studies, McGill University, Montreal. SE3D: a Controlled Comparative Usability Study of a Virtual Reality Ontology Hierarchy Explorer Supervisors: Dr. John E. Leide, Dr. Catherine Guastavino

Research Masters of Applied Sciences: 2002-2004

Department of Applied Mathematics and Industrial Engineering École Polytechnique of Montreal. *Voice Usage in Multimedia Learning* <u>Advisor</u>: Dr. Jean-Marc Robert

Bachelor of Industrial Engineering: 1994-1998

Department of Applied Mathematics and Industrial Engineering École Polytechnique of Montreal Logistics and software development

Awards and Honors

- 2nd prize: Best poster presentation. ASTED Joint Library & Information Community conference, (Nov. 12-13, 2009). Montreal, Canada. \$300
- Fond Québécois de Recherche sur la Société et la Culture (FQRSC) Doctoral Grant (2008, 2009) 33 000\$
- McGill GSLIS Departmental Travel Grant (2006) \$500
- École Polytechnique of Montreal Outstanding Extracurricular Involvement Award (1998) -500\$

Research

Grants

- Julien, Charles-Antoine. A novel library collection browsing and information retrieval tool. (09/13-08/16). Fond Québécois de Recherche sur la Société et la Culture. New Researcher Program. \$38.6K.
- Julien, Charles-Antoine. Social Network Visualization to Facilitate Subject Browsing in Library Collections. (2013-14). *McGill Office of Sponsored Research*. Internal SSHRC Program. \$6.5K (Declined).

Peer Reviewed Journals

- 1. Julien, Charles-Antoine, Pierre Tirilly, Jesse David Dinneen, and Catherine Guastavino. (2013). Reducing Subject Tree Browsing Complexity (Early View). *Journal of the American Society for Information Science and Technology*.
- 2. Julien, Charles-Antoine, Pierre Tirilly, John E. Leide and Catherine Guastavino. (2012). Constructing a True LCSH Tree of a Science and Engineering Collection. *Journal of the American Society for Information Science and Technology*. 63:12 2405-2418.
- 3. Julien, Charles-Antoine, Catherine Guastavino and France Bouthillier. (2012). Capitalizing on Information Organization and Information Visualization for the Future Generation Catalogue. *Library Trends*; 61(1) 149-161.
- 4. Cole, Charles, Charles-Antoine Julien and John E. Leide. (2010) An Associative Index Model for the Results List Based on Vannevar Bush's Selection Concept. *Information Research*. 15:2. Available at <u>http://informationr.net/ir/15-3/paper435.html</u>
- 5. Julien, Charles-Antoine and Charles Cole. (2009). Capitalizing on Controlled Subject Vocabulary by Providing a Map of Main Subject Headings: an Exploratory Design Study. *Canadian Journal of Information and Library Sciences.* 33:1/2 67-83.
- 6. Julien, Charles-Antoine, John E. Leide and France Bouthillier. (2008). Controlled Comparative User Evaluations of Information Visualization Interfaces for Text Retrieval: Review and Meta-Analysis. *Journal of the American Society for Information Science and Technology*. 59:6 1012-1024.
- 7. Julien, Charles-Antoine and France Bouthillier. (2008). Le catalogue réinventé. Documentation et bibliothèques. 54:3 229-239.

Peer Reviewed Conference Papers

- 1. Julien, Charles-Antoine and Pierre Tirilly. (Nov. 1-6, 2013). Exact versus Estimated Pruning of Subject Hierarchies (Accepted), Annual Meeting of the American Society for Information Science and Technology (ASIST). Montreal, Canada: ASIST.
- Julien, Charles-Antoine., Pierre Tirilly, John E. Leide and Catherine Guastavino. (Aug. 7th, 2012). Using the LCSH Hierarchy to Browse a Collection, Paper presented at the Annual Conf. of the Int. Society for Knowledge Organization. (pp. 109-116). Mysore, India.
- 3. Tirilly, Pierre., & Julien, Charles-Antoine. (Aug. 7th, 2012). Random Walks for Subject Hierarchy Simplification, Paper presented at the Annual Conf. of the Int. Society for Knowledge Organization. (pp. 117-123). Mysore, India.

- Julien, Charles-Antoine, Pierre Tirilly, John E. Leide and Catherine Guastavino. (Jan. 24th, 2012). Exploiting major trends in subject hierarchies for large-scale collection visualization. In P. C. Wong, D. L. Kao, M. C. Hao, C. Chen, R. Kosara, M. A. Livingston, J. Park & I. Roberts (Eds.), Proc. of IS&T/SPIE Electronic Imaging Conf. on Visualization and Data Analysis. San Francisco, CA. Available at <u>http://spie.org/x648.html?product_id=912284</u>
- Beheshti, Jamshid, Andrew Large, Charles-Antoine Julien and Marni Tam. (Oct. 25th, 2010). A Comparison of a Conventional Taxonomy with a 3D Visualization for use by Children. In Proc. of Annual Conf. of the American Society for Information Science and Technology. Pittsburgh, Pennsylvania.
- Julien, Charles-Antoine, Catherine Guastavino, France Bouthillier and John E. Leide. (June 3rd, 2010). Subject Explorer 3D: a novel Virtual Reality Collection Browsing and Searching Tool. In *Proc. of the Annual Conf. of the Canadian Association for Information Science*, Concordia University, Montreal, Canada. Available at:www.cais-

acsi.ca/proceedings/2010/CAIS062_JulienGuastavinoBouthillierLeide_Final.pdf

- 7. Julien, Charles-Antoine, France Bouthillier and John E. Leide. (Nov. 6th, 2006). Spatialized Information Visualizations: a "BASSTEP" Approach to Application Design. In *Proc. of Annual Conf. of the American Society for Information Science and Technology*. Austin, Texas.
- 8. Bouthillier, France, Tao Jin and Charles-Antoine Julien. (Apr. 27th, 2006). The Use of Competitive Intelligence Technology by Competitive Intelligence Practitioners: A Comparison Between the Public and Private Sectors. In *Proc. of the Annual Conf. of the Society of Competitive Intelligence Professionals (SCIP).*
- 9. Beheshti, Jamshid, Andrew Large and Charles-Antoine Julien (2005). Designing a Virtual Reality Interface for Children's Web Portals. In *Proc. of the Annual Conf. of the Canadian Association for Information Science*, University of Western Ontario, London. Available at http://www.cais-acsi.ca/proceedings/2005/beheshti_2005.pdf
- 10. Julien, Charles-Antoine and Jean-Marc Robert. (June 5th, 2005). Time-Scale Modification for Online Learning: Making the Most of One's Ears. *In Proc. of LASTED Int. Conf. on Education and Technology*. Calgary, Alberta, Canada. 179-184.

Book Chapter

1. Beheshti, Jamshid, Andrew Large and Charles-Antoine Julien (2008). Designing a Virtual Reality Interface for Children's Web Portals. In P. Rao & S. A. Zodgekar (Eds.), *Virtual Reality: Concepts and Applications* (pp. 193-208): The Icfai University Press.

Peer Reviewed Conference Presentations

- 1. Julien, Charles-Antoine. (May 15th, 2008). Le catalogue réinventé. *Conférence annuelle de la corporation des bibliothécaires publiques du Québec (CBPQ)*. Montreal, Qc.
- 2. Julien, Charles-Antoine. (May 16th, 2006). Visualisation de l'information et problèmes d'évaluation des applications. *Annual ACFAS Conference*, McGill University of Montreal.

Peer-Reviewed Poster/Short Papers

 Julien, Charles-Antoine, Pierre Tirilly, John E. Leide and Catherine Guastavino. (2012). Exploiting major trends in subject hierarchies for large-scale collection visualization. Short paper in P. C. Wong, D. L. Kao, M. C. Hao, C. Chen, R. Kosara, M. A. Livingston, J. Park & I. Roberts (Eds.), Proc. of IS&T/SPIE Electronic Imaging Conf. on Visualization and Data Analysis. San Francisco, CA.

- Julien, Charles-Antoine, Catherine Guastavino and France Bouthillier. (2009). A Future Generation OPAC in Virtual Reality / Un catalogue prochaine génération en réalité virtuelle. Poster presented at the Joint Library & Information Community conference, Nov. 12-13, 2009. Montreal, Canada. 2nd place Best Poster Award.
- 3. Julien, Charles-Antoine, France Bouthillier and John E. Leide. (2006). Spatialized Information Visualizations: a "BASSTEP" Approach to Application Design. Short paper in *Proceedings of Annual Conf. of the American Society for Information Science and Technology*. Austin, Texas.

Invited Talks

- 1. Julien, Charles-Antoine. (2012). Towards Automatic Simplification of Information Organization Structures. McGill School of Information Studies Speakers series. Montreal, Canada.
- Julien, Charles-Antoine. (2011). Simplifying MeSH for Easier Browsing. University of Wisconsin in Milwaukee School of Information Studies Guest Speakers Series. Available at:: <u>http://soisprojects.uwm.edu/media/player?episode=4cb6e48a90774475807a6afd8222a888</u>
- 3. Julien, Charles-Antoine. (2011). 3D Information Visualization of a Semantically Organized Collection. University of Wisconsin in Milwaukee School of Information Studies Guest Speakers Series. Available at:

https://pantherfile.uwm.edu/groups/sois/media/iorg_julien_2011-02-24/index.html

- 4. Julien, Charles-Antoine. (2010). Subject Explorer 3D (SE-3D): Information Retrieval in a Virtual Reality Searching and Browsing Tool. McGill School of Information Studies Speakers series. Montreal, Canada.
- 5. Julien, Charles-Antoine. (2009). The Future of the Online Catalogue Workshop. ASTED Joint Library & Information Community Conference, Nov. 11th, 2009. Montreal, Canada.
- 6. Julien, Charles-Antoine. (2008). Reinventing the Catalogue, *McGill Libraries One Site Committee*. McGill University, Montreal, Canada.
- 7. Julien, Charles-Antoine. (2008). Reinventing the Catalogue, McGill Libraries Staff Seminar. Montreal, Qc.
- 8. Julien, Charles-Antoine. (June 16th, 2008). Le catalogue réinventé, *Provincial academic library* (*CREPUQ*) consortium, library technology sub-committee. Montreal, Canada.

Research Assistant Experience

- 1. Information Visualization Interfaces for a Children's Web Portal. (Jan to May 2010). *Social Science and Humanities Research Council (SSHRC) of Canada*. Supervised by Prof. Jamshid Beheshti and Andrew Large. Lead developer and collaborative designer of a 3D interactive information organization browsing application. Design and execution of testing with children.
- 2. A visual subject browsing tool for The Paulo and Nita Freire International Project for Critical Pedagogy Archives (Jan to June 2008). *Paulo and Nita Freire Foundation*. Designer and Developer a static visual representation of the collection information organization integrated into a live Web site. Supervised by Dr. Charles Cole.
- 3. The Use of Competitive Intelligence Technology by Competitive Intelligence (CI) Practitioners (June 2005 to April 2008). *SSHRC Canada*. Supervised by Prof. France Bouthillier. Project sought to gather and compare competitive intelligence technology use by public vs. private sector practitioners.
- 4. ENVI : Environnement Virtuel Intelligent. (Jan to Mar 2006). *Heritage Canada*. Supervised by Dr. Charles Cole. Project sought to design and develop an online virtual reality historical content game for children.

5. Virtual Interface for Children's Web Portals (Jan to Oct. 2005). *SSHRC Canada*. Supervised by Prof. Jamshid Beheshti and Andrew Large. Project sought to design, develop and test a virtual reality portal of history related Web pages.

Teaching

Instructor

Web Systems Design (Fall 2013)

- McGill School of Information Studies optional course, 40 students.
- Functional use of HTLM/CSS
- Management of design, development, testing and implementation process of a functioning web site

Database Design (Winter 2013)

- McGill School of Information Studies optional course, 40 students.
- Relational database theory
- Design and construction of relational database using Microsoft Access

Information Retrieval (Winter 2012 -2013)

- McGill School of Information Studies optional course, 10-20 students.
- Theoretical and practical understanding of vector space model, Google PageRank, text storage and retrieval, semantic Web.
- Created a new technical final project option done in Ruby programming.
- Basics of programming to non-technical students.

Information Organization (Spring 2011, Summer 2011 Online)

- University of Wisconsin in Milwaukee School of Information Studies core mandatory course
- Fundamentals of metadata, encoding standards, authority control, subject analysis, and classification.
- 27 students, format is 2.5 hours per week, half theory/half practical exercises.
- 100% online version included audio narrated presentation, management of discussion groups and online tutorials.

Information Systems Design (Fall 2007 and 2008)

- McGill University School of Information Studies mandatory course.
- 80+ students, format was 2 hours of theory and 3 hours of lab per week
- Fundamental concepts of information storage and retrieval. Includes user requirement analysis, information structure analysis, database organizations and characteristics, bibliographic database construction, search techniques and strategies, OPACs, and hardware and software choices
- Manage teaching assistant time to perform the lab sessions and some of the grading
- Manage student conflicts and grading appeals

Teaching Assistant

Information Systems Design (Fall 2005, Fall 2006)

- McGill University School of Information Studies mandatory course
- Direct and support three groups of 24+ students during their respective one hour lab sessions
- Hold office hours every week, grade approximately 70% of the projects and exams

Research Methods (Winter 2005, Winter 2006)

- McGill University School of Information Studies mandatory course
- Fundamental aspects of reflective thinking and the methods and techniques of research appropriate to the investigation of library/information problems. Criteria helpful in evaluating published research in library/information studies by analyzing the various steps of the research process, thereby providing guidelines for planning, conducting, and reporting research
- Mandatory course given to 80+ students. Format is 3 hours of in class lectures per week
- Hold office hours every week, grade all of the projects and exams

Guest Lecturer

- McGill SIS 617 and SIS 702 Human-Computer Interaction (2009)
- McGill SIS 657 Database Design Data Maintenance (2007, 2008, 2009)
- McGill SIS 616 Information Retrieval Information Visualization (2007, 2008, 2009)
- McGill SIS 617 Information Systems Design Computer Indexing (2006)
- McGill SIS 611 Research Methods Basic Statistics (2005-2006)
- McGill SIS 617 Information Systems Design SQL (2005)

Service

Peer Review

- Annual Meeting of the American Society for Information Science and Technology (2013) Montreal, Canada.
- Journal of Documentation (2013)
- Program Committee Member (2012), 2nd Milwaukee Conf. on Ethics in Information Organization
- Library Trends (2012)
- Interacting With Computers (2011)
- Canadian Journal of Information and Library Science (2012, 2009)
- Editorial Board Member, Library Student Journal (2008 2010)

Book Review

Visual Interface Design for Digital Cultural Heritage: a Guide to Rich-Prospect Browsing. Reucker, Stan, Milena Radzikowska, and Stéfan Sinclair. *Digital Studies / Le champ numérique*. 3:1. Spring 2012. Available at: <u>http://www.digitalstudies.org/ojs/index.php/digital_studies/article/view/239/289</u>

Administration

Faculty of Education IT Committee, Dept. Representative (Feb. 2013 – Ongoing)

Dept. New Faculty Search Committee Member (Jan. 2013 – April. 2013)

Faculty of Education Council, Dept. Representative (Jan. 2013 – Ongoing)

Dept. Speakers Series Organizer (Jan. 2013 – Ongoing)

Dept. Communication Committee Member (Sept. 2012 – Ongoing)

• Support oversight of departmental communication guidelines (e.g., Web Site)

Dept. PhD Representative (Oct. 2006 - Apr. 2009)

- Recruit PhD students to serve on various committees
- Hold and organize official greeting of new PhD students every semester
- Initiated and organized the first Montreal LIS PhD Connections Colloquium with students from the McGill School of Information Studies and the University of Montreal School of Library and Information Science.
- Initiated and continuously organized the SIS PhD Connections lunchtime research talk given twice per semester.
- Initiated and organized a yearly fall BBQ, organized a spring maple sugar shack outing.

Dept. Oversight Committee member, ALA Re-accreditation (2008-2009)

- Experienced the 18 month-long process of interpreting the ALA standards and gathering the appropriate information via various sub-committees.
- Critically reviewed multiple draft versions of the report.

Professional Experiences

SRTelecom Inc., Montreal, Qc. (2002-2003)

CRM software solutions independent consultant

- Technical lead and functional role during an 18 month CRM implementation (4GL programming)
- Trainer and support of software solutions
- CRM software solution maintenance and growth

Access Commerce Inc., Canada, France, US. (2001-2002)

Business Consultant and Trainer of CRM Software Solutions

- Functional process analysis
- Trainer, development and instruction of a 10 day technical software course
- Instructor of software usage to multiple customer groups in US and Canada
- CRM solution implementations with internal and external resources
- Customer requirements analysis and management of related expectations

MindReady Solutions Inc., Montreal, Qc. (1999-2001)

Business Software Implementation and Support Leader

- Siebel CRM implementation and usage
- Developed and taught Microsoft Access level 1 course
- Assured needs of internal clients matched realistic supplier deliverables
- Advanced Microsoft Office programming for HR management system

BAAN ERP Software Expert (under BELTRON INC.)

- Trainer, developed training material for a 10 day technical software course
- BAAN Enterprise Project management module.

HSO Business Systems, USA, Netherlands. (1998-1999)

BAAN ERP certified technical consultant

- Trainer. Prepared, taught and supported technical software courses
- Design, development and implementation of customer enhancements to manufacturing, distribution and finance modules
- BaaN 4GL programming, specifications and work management with juniors

Devex Inc., Devlor Inc., Publications De Villers, Montréal, Qc. (1998)

Database Developer

- Microsoft Access database design, development, testing and implementation
- Configuration and CRM applications
- Interface design, user testing and iterative development.

Technical Knowledge

Certifications

- APICS Certified in Production & Inventory Mgt. (CPIM)
- APICS Train the Trainer and Learning Dynamics for Instructors
- SAP ABAP 4 certified consultant, BaaN ERP Overview certified

Programming Languages and Specialized Business Software

- C#, Visual Basic, Access & Excel VBA, MySQL
- HTML/CSS, Javascript, ASP.net, Ruby, PHP
- SAP, BaaN, Microsoft Great Plains, Great Plains Siebel CRM, Cameleon CRM