Brian R. Hall

hall@champlain.edu | 802-865-5730 | Champlain College | 163 South Willard St. | Burlington, Vermont

EDUCATION

Sc.D. in Information Systems and Communications   **2011 - 2014**
Robert Morris University, Pittsburgh, PA
Dissertation: *A Synthesized Definition and Analysis of Computer Ethics*

M.S. in Information Technology   **2007 - 2010**
Kettering University, Flint, MI

Graduate Study in History (Reform Movements)   **2004**
Indiana State University, Terre Haute, IN

B.S. in Information Technology   **2002 - 2004**
Indiana State University, Terre Haute, IN
Cum Laude

A.A.S. in Computer Information Systems   **2001 - 2002**
Lake Land College, Mattoon, IL
Summa Cum Laude

TECHNICAL SKILLS & INTERESTS

- C/C++ & Python
- x86/x86_64 Assembly
- Microcontroller Programming
- 3D Modeling & Printing
- Web/Services
- COBOL
- Database Platforms
- Watchmaking
- Computer Architecture
- Text Mining
- Software Engineering
- Computing Education
- Computing Ethics
- Information Theory
- History & Social Movements
- LEGO

ACADEMIC EXPERIENCE

Champlain College   **2010 - Present**
◇ **Professor**, Computer Science   2022 - Present
◇ **Associate Professor**   2016 - 2022
◇ **Assistant Professor**   2010 - 2016
◇ **Program Director**, Computer Science & Innovation Major   2017 - 2024

Teaching
- CCC 412 College Capstone (CSI)
- CSI 440 Software Requirements Engineering
- CSI 370 Computer Architecture
- CSI 330 Software Development Methodologies
- CSI 320 Global IT & Ethics
- CSI 240 Advanced Programming (C++)
- CSI 180 Innovation I: Technology Sandbox
- CSI 140 Introduction to Programming (C++)

Past Teaching
- Graduate: MIT 540 Managing Innovation, MIT 505 Project Management, MIT 500 Foundations of IT Management
- CIT 265 Information Systems
- CIT 210 Hardware & Architecture
- CIT 140 Systems Software
- CIT 135 Computer Theory (w/Python)
- CIT 130 Introduction to Networking & Security
- WEB 125 Web Development

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ACADEMIC
EXPERIENCE
(CONTINUED)

Indiana State University   **2004**
◇ **Teaching Assistant**, Department of History, Advisor: Richard Schneirov, Ph.D.
  - HIST 336 1960s: Counterculture and Protest

ACADEMIC
SERVICE

Champlain College

◇ **Grants**
  - NSF EPIIC #2331431 - $400,000   2023 - 2026

◇ **Curriculum Development**
  - Computer Science & Innovation (CSI) major
  - Data Analytics/Science major and minor
  - Software Engineering concentration
  - CSI 370 Computer Architecture, CSI 320 Global IT & Ethics, ITS 380 Science, Technology and Fiction, CSI 140 Intro and 240 Advanced Programming
  - Managing Information Systems (MIS) minor; CIT 265 Information Systems; CIT 365 Enterprise Architecture; CIT 140 Systems Software

◇ **Committees**
  - Curriculum Steering Committee   2024 - Present
  - Faculty Senate Executive Committee   2023
  - Faculty Evaluation Committee   2019 - 2024, Chair 2023
  - Academic Affairs Committee   2014 - 2016
  - College Competency Committee, Faculty co-chair   2013 - 2018
  - NEASC Self-study Committee (Standards 8 & 9)   2013 - 2015
  - Institutional Review Board (IRB)   2012 - 2014
  - Curriculum Committee   2011 - 2012

◇ **Searches**
  - Assistant/Associate Professor, Computer Science   2023
  - Assistant/Associate Professor, Data Analytics   2022 - 2023
  - Assistant Professor, Computer Science   2019 - 2020
  - Assistant Professor, Computer Science   2016
  - Dean, Division of Information Technology & Sciences   2016
  - Assistant/Associate Professor, Computer Science (3 positions)   2015 - 2016
  - Assistant/Associate Professor, Computer Science   2015
  - Assistant/Associate Professor, Marketing (2 positions)   2014 - 2015
  - Assistant/Associate Professor, Game Programming   2014
  - Provost and Chief Academic Officer   2014
  - Assistant/Associate Professor, Mobile Development   2013 - 2014
  - Team Leader, Leahy Center for Digital Investigation (LCDI)   2011

◇ **Miscellaneous**
  - Re-imagining science curriculum working group   2022 - 2023
  - Assistant Department Chair   2015 - 2016
  - Faculty Advisor, ACM student chapter - SGA computing club   2016 - 2023
  - Student Advising, Faculty Senate, ITS Leadership Team, Prospective and accepted student events, Local elementary school outreach

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INDUSTRY EXPERIENCE

InSpace **2020 - 2024 (Acquired)**
Founding Partner & Advisor, InSpace Proximity, Colchester, VT
  ◇ Founding partner and advisor overseeing various aspects of product content and feature development with a focus on ideation and quality control.

Wolfram Research **2005 - 2010**
Systems Engineer, Wolfram Research, Champaign, IL
  ◇ Provided infrastructure, server, client, web, database, application, network services, and user support for Wolfram Research and Wolfram|Alpha, including domestic and international offices. Main responsibilities in technical administration: developing, implementing, and maintaining servers and applications.

Casey Tool & Machine, Inc. **2001 - 2005**
Quality Control Engineer, Casey, IL
  ◇ Created and maintained a quality control database and interface to organize, analyze, and report product quality in all manufacturing departments. Performed routine audits of manufactured products.

Eastern Illinois University **Winter 2001 - 2002**
COBOL and SQL Programmer, Charleston, IL
  ◇ Assisted in the implementation of an online time-card system as part of a programming team, which included extensive programming in COBOL as well as SQL and JCL. A database system was also designed as a secondary project.

Independent Technology Consultant and Programmer **Since 2000**
Here and There
  ◇ Worked on many independent and research related tasks for individuals and businesses. Extensive use of web technologies HTML, CSS, XML, and JSON. Expert knowledge of Assembly, C/C++, Python, COBOL, and SQL. Expert knowledge of Apple systems, devices, and applications. Advanced knowledge of Microsoft and Linux systems and applications. Expert knowledge of servers, clients, networks, and services.

PROJECTS

Watch Complications
  ◇ I am a watch enthusiast, reviewer, and self-trained maker. Ten Six Watches is my watch company. Watch Complications is the name of my website and YouTube channel. I spend a fair amount of time creating helpful watch content and making custom watches and components for clients.

Tidbyt Programming
  ◇ I enjoy writing a variety of applets for the Arduino based desktop display. Apps can be found on my GitHub.

WordSnapper
  ◇ A text mining application written in C++. Does all kinds of cool stuff at blistering speed such as frequency analysis, bigram analysis, semantic analysis, bilateral filtering, stemming, trimming, visualization, and several other features. The goal of the application is to provide the researcher with semantic insight into analyzed texts (e.g., counts, word relationships, themes).

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INTELLECTUAL
PROPERTY

Hall, Brian R. WordSnapper, Text Mining Application. US Copyright, 2014.

PUBLICATIONS

Books

Hall, B. R., & Slonka, K. J. (2020). *Assembly Programming and Computer Architecture for Software Engineers* (2nd Ed.) Burlington, VT: Prospect Press.

Hall, B. R., & Slonka, K. J. (2018). *Assembly Programming and Computer Architecture for Software Engineers.* Burlington, VT: Prospect Press.

Journal Articles *(click to view Google Scholar page)*

1. Hall, B. R. (2014). A synthesized definition of computer ethics. *ACM Computers and Society, 44*(3), 21-35. doi:10.1145/2684097.2684102

2. Hall, B. R. (2013). Technology and thinking: A conflict. *The International Journal of Technology, Knowledge, and Society, 8*(4), 119-120. https://doi.org/10.18848/1832-3669/CGP/v08i04/56313

3. Hall, B. R. (2012). Google critique: An application of depoliticization theory. *Technology in Society, 34*(3), 251-255. doi:10.1016/j.techsoc.2012.07.003

4. Hall, B. R. (2012). Information, communication, and technology: Like industry, like academia? *CISConvergence Journal, 1*(1), 7-14.

5. Hall, B. R. (2012). An ethics whirlwind: A perspective of the digital lifestyle of digital natives and initial thoughts on ethics education in technology. *Information Systems Education Journal, 10*(1), 4-12. http://isedj.org/2012-10/

6. Hall, B. R. (2011). IS/IT education vs. business education: The plight of social collapse in technical business environments. *Information Systems Education Journal, 9*(2), 55-64. http://isedj.org/2011-9/

Selected Conference Papers and Invited Talks

1. Hall, B. R. (2015). A Snapshot of the Subject Matter of Computing Ethics. In *Proceedings of the 21st IEEE International Symposium on Technology and Society (ISTAS '15)*, Dublin, IE. IEEE. doi: 10.1109/ISTAS.2015.7439396

2. Chen, W. K., & Hall, B. R. (2013). Applying software engineering in CS1. In *Proceedings of the 18th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE '13)*, Canterbury, UK. ACM. doi:10.1145/2462476.2462480

3. Little, J. C., Lind, M. R., Hall, B. R. (2011). The tenth strand: Proposing a separate course in societal and ethical issues for information systems majors. *The Proceedings of the Information Systems Education Conference 2011*, v.28 n.1775, Wilmington, NC.

4. Lind, M. R., Hall, B. R., Chen, W., Babb, J. S., Pauli, W. E., Reynolds, J., Schwieger, D., Surendran, K. (2011). Model curriculum "wiki" birds of a feather panel session. *The Proceedings of the Information Systems Education Conference 2011*, v.28 n.1770, Wilmington, NC.

5. Hall, B. R. (Fall 2013). Computer ethics introduction, *Senior Seminar*. Lecture conducted from The University of Vermont, Burlington, VT.

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PUBLICATIONS
<small>(CONTINUED)</small>

Public Discourse

1. Hall, B. R. (2015). *cdecl* versus *stdcall* on x86 architecture: But really a discussion of how function calls use registers and stack. *Technical Papers.* (TP No. 2). http://www.brianrhall.net/technicalpapers/TP2.pdf

2. Hall, B. R. (2014). An introduction to using SOAP and REST services for data retrieval. *Technical Papers.* (TP No. 1). [Code Samples Provided] http://www.brianrhall.net/technicalpapers/TP1.pdf

3. Hall, B. R. (2013). Ellul and I "connected": A technologist's response to a philosopher's propositions concerning LinkedIn. *Discourse Papers.* (DP No. 3). http://www.brianrhall.net/discoursepapers/DP3.pdf

4. Hall, B. R. (2012). Technology and thinking: A conflict. *Discourse Papers.* (DP No. 2). http://www.brianrhall.net/discoursepapers/DP2.pdf

5. Hall, B. R. (2012). ICT: The core business of industry. *Discourse Papers.* (DP No. 1). http://www.brianrhall.net/discoursepapers/DP1.pdf

6. Hall, B. R. (2011). "Whoa...rock and roll": Going airborne via amplification. *Technology & Back to the Future: "This is Heavy".* Technology &.

7. Hall, B. R. (2010, September 16). Campus overload - Dear frosh: I wish I'd known about life's twists. *Campus Overload.* The Washington Post [Web].

8. Hall, B. R. (n.d.). In the EDSIG ACM/AIS Model Curriculum Wiki: http://www.edsigbh.org/curwiki/index.php?title=Ethics_in_the_Model_Curriculum

CODE
<small>(CLICK ITEM)</small>

◇ https://github.com/brianrhall/

◇ Creating R plots with C++ using Xcode.

◇ LaTeX Syllabus Template. #1 Google hit for search term "latex syllabus template".

◇ SOAP and REST code examples. Based on TP1: An introduction to using SOAP and REST services for data retrieval.

PEER REVIEWING

◇ Syllabus Journal	2012 - 2020
◇ The International Journal of Technology, Knowledge, and Society	2013
◇ Information Systems Education Conference/Journal (ISECON/ISEDJ) 2010, 2011 and Conference on Information Systems Applied Research (CONISAR)	

PROFESSIONAL MEMBERSHIPS

◇ Association for Computing Machinery (ACM) + SIGCAS	Current
◇ Institute of Electrical and Electronics Engineers (IEEE)	Past
◇ Association of Information Technology Professionals (AITP)	Past
◇ Education Special Interest Group for IS education (EDSIG)	Past

HONORS & AWARDS

◇ **Champlain College**, Faculty Development Fellowship	Fall 2015
◇ **Alpha Iota Mu**, National Honor Society for Info. Systems	Lifetime Member
◇ **NSF**, Computer Science, Engineering, and Mathematics Scholarship	2002 - 2004
◇ **Indiana State University**, Transfer Scholarship	2002

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ITEMS OF
NOTE

◇ My family travels extensively throughout the world, but our second home is the Hawaiian Islands. More specifically, we love Maui, Lāna'i and Molokini. Kaua'i and Moloka'i are on the bucket list. We explore the islands every year as there is so much to see and learn. We deeply respect the history, nature, culture and beauty of the archipelago.

◇ Work and life have led me to many towns, states, and countries. I won't list everything, but if you throw a dart at a globe I've probably been there.

◇ Speaking of international intrigue, I married an Armenian and my best friend is Finnish. Life is interesting.

◇ I enjoy cooking/baking shows, British dramas ala Downton Abbey style, LOTR, Star Wars, Frasier, MadMen, Seinfeld, The Big Bang Theory, and 2% milk. I also enjoy golfing, reading, music, and all things watches. And LEGO!

LANGUAGES   English (fluent), Armenian (intermediate).

WEBSITES   https://www.brianrhall.com
https://watchcomplications.com
https://www.youtube.com/@watchcomplications