

FRANK MCCOWN

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Degrees

Ph.D. in Computer Science - Old Dominion University (2007)
M.S. in Computer Science - University of Arkansas at Little Rock (2002)
B.S. in Computer Science - Harding University (1996)

Appointments

8/07 to Present – Assistant Professor of Computer Science at Harding University (Searcy, Arkansas)
8/97 to 8/07 – Instructor of Computer Science at Harding University (Searcy, Arkansas)
6/96 to 8/97 – Software Engineer for Lockheed Martin Astronautics (Denver, Colorado)
6/95 to 8/95 – Software Engineer Intern for Auto-trol Technology (Denver, Colorado)

Consulting

2009 – Law Office of Jeffrey J. Antonelli, Ltd. (Chicago, Illinois), Provided website reconstructions and technical information regarding archived web pages from the Internet Archive
2008 – Los Alamos National Laboratory (Los Alamos, New Mexico), Digital Library and Prototyping Team, Research investigating preservation of OAI-ORE resource maps
2007 – Kaufman & Canoles law firm (Norfolk, Virginia), Expert witness for the defense, provided testimony on archived web pages from the Internet Archive
2004 – Down Under Exotic Timbers (Searcy, Arkansas), Constructed dynamic e-commerce website
2004 – College Church of Christ (Searcy, Arkansas), Designed online membership directory
2003 – TV3 (Searcy, Arkansas), Built weather presentation software
2003 – Anderson Lawn (Searcy, Arkansas), Constructed dynamic website for managing customers

Professional Societies

Association for Computing Machinery (ACM)
ACM Special Interest Group on Computer Science Education (SIGCSE)

Honors

2007 – Outstanding Graduate Research Assistant (Old Dominion University)
2006 – College of Sciences Dissertation Fellowship (Old Dominion University)
2005 – Outstanding Graduate Assistant (Old Dominion University)
2004 – Dominion Graduate Scholar (Old Dominion University)
1996 – Harding University Programming Team Honors
1996 – Winner of Software Development Project Competition - Scorched Sea (Harding University)
1995 – Science and Nursing Convocation Scholarship (Harding University)
1992 – Academic and Chancellor's Scholarship (Harding University)
1992 – Smoky Hill High School Distinguished Computer Science Award
1989 – Winner of Nibble's Short Program Contest

Courses Taught

Computing Seminar (2008)
Computer Graphics (1997-2003)
Data Communications and Networking (2004)

Data Structures (1998-1999)
Game Programming (2009)
GUI Programming (1997-2004, 2007-2009)
Internet Development I (2002-2004, 2008-2009)
Internet Development II (2002-2004)
Introduction to Programming (1997-2004, 2007-2009)
Mobile Computing (2010)
Software Development Project (1998, 2007)
Search Engine Development (2008, 2009)

Service

Professional

- Program co-chair for the International Workshop on Innovation in Digital Preservation (InDP 2009)
- Program Committee for ACM IEEE Joint Conference on Digital Libraries (2008-present)
- Program Committee for WWW2009 User Interfaces and Mobile Web track
- Reviewer for SIGCSE Symposium (2009-present)
- Reviewer for Consortium for Computing Sciences in Colleges (2007-present)
- Reviewer for Journal of Educational Resources in Computing (2006)
- Reviewer for International Journal on Digital Libraries (2007)
- Tech Lunches organizer, Old Dominion University (2007)
- Warrick system administrator (2006-present)
- Webmaster, Harding Computer Science Department website (1997-present)

Personal

- Big Brothers Big Sisters Program, Norfolk, Virginia (2006)
- Adult and Youth Bible Class Teacher, Bayside Church of Christ (2005- 2007) and Cloverdale Church of Christ (2008-present)
- Knights Social Club Sponsor, Harding University (1997-2004)
- Friends program, Harding University (1994-1996, 2002-2004)

Publications

Conference and Workshop Proceedings

1. Frank McCown, Teaching Web Information Retrieval to Undergraduates, In *Proceedings of the 41st ACM technical symposium on Computer science education (SIGCSE 2010)*, Mar 2010, Milwaukee, WI, To appear.
2. Frank McCown and Michael L. Nelson, What Happens When Facebook is Gone?, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2009)*, June 2009, Austin, TX.
3. Frank McCown and Michael L. Nelson, A Framework for Describing Web Repositories, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2009)*, June 2009, Austin, TX.
4. Frank McCown, Michael L. Nelson, and Herbert Van de Sompel, Everyone is a Curator: Human-Assisted Preservation for ORE Aggregations. *Proceedings of DigCCurr 2009*, Apr 2009, Chapel Hill, NC.
5. Frank McCown and Michael L. Nelson , Recovering a Website's Server Components from the Web Infrastructure, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2008)*, June 2008, Pittsburgh, PA.
6. Frank McCown and Michael L. Nelson , Usage Analysis of a Public Website Reconstruction Tool, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2008)*, June 2008, Pittsburgh, PA.
7. Frank McCown, Amine Benjelloun, and Michael L. Nelson, Brass: A Queueing Manager for Warrick, In *Proceedings of the 7th International Web Archiving Workshop (IWAW 2007)*, June 2007, Vancouver, British Columbia, Canada.
8. Frank McCown and Michael L. Nelson, Agreeing to Disagree: Search Engines and their Public Interfaces, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2007)*, June 2007, Vancouver, British Columbia, Canada, p. 309-318.

9. Frank McCown, Norou Diawara, and Michael L. Nelson, Factors Affecting Website Reconstruction from the Web Infrastructure, In *Proceedings of the ACM IEEE Joint Conference on Digital Libraries (JCDL 2007)*, June 2007, Vancouver, British Columbia, Canada, p. 39-48.
10. Catherine C. Marshall, Frank McCown, and Michael L. Nelson, Evaluating Personal Archiving Strategies for Internet-based Information, In *Proceedings of IS&T Archiving 2007*, May 2007, Arlington, Virginia, USA, p. 151-156.
11. Frank McCown and Michael L. Nelson, Characterization of Search Engine Caches, In *Proceedings of IS&T Archiving 2007*, May 2007, Arlington, VA, p. 48-52.
12. Frank McCown and Michael L. Nelson, Search Engines and Their Public Interfaces: Which APIs are the Most Synchronized? In *Special interest tracks and posters of the 16th International World Wide Web Conference (WWW 2007)*, May 2007, Banff, Alberta, Canada, p. 1197-1198.
13. Frank McCown, Joan A. Smith, Michael L. Nelson, and Johan Bollen, Lazy Preservation: Reconstructing Websites by Crawling the Crawlers, In *Proceedings of the 8th ACM International Workshop on Web Information and Data Management (WIDM 2006)*, November 2006, Arlington, VA.
14. Frank McCown and Michael L. Nelson, Evaluation of Crawling Policies for a Web-Repository Crawler, In *Proceedings of the 17th ACM Conference on Hypertext and Hypermedia (HYPERTEXT 2006)*, August 2006. Odense, Denmark, p. 157-168.
15. Frank McCown, Johan Bollen, and Michael L. Nelson, Evaluation of the NSDL and Google Search Engines for Obtaining Pedagogical Resources, In *Proceedings of the 9th European Conference on Research and Advanced Technology for Digital Libraries (ECDL 2005)*, September 2005, Vienna, Austria. p. 344-355.
16. Frank McCown, Sheffan Chan, Michael L. Nelson, and Johan Bollen, The Availability and Persistence of Web References in D-Lib Magazine, In *Proceedings of the 5th International Web Archiving Workshop (IWA 2005)*, September 2005, Vienna, Austria.
17. Daniel S. Swaney, Frank McCown, and Michael L. Nelson, Dynamic Web File Format Transformations with Grace, In *Proceedings of the 5th International Web Archiving Workshop (IWA 2005)*, September 2005, Vienna, Austria.
18. Kailash Bhoopalam, Kurt Maly, Frank McCown, Ravi Mulkamala, and Mohammed Zubair, A Flexible Framework for Content-Based Access Management for Federated Digital Libraries, In *Proceedings of the 9th European Conference on Research and Advanced Technology for Digital Libraries (ECDL 2005)*, September 2005, Vienna, Austria, p. 489-490.
19. Kailash Bhoopalam, Kurt Maly, Frank McCown, Ravi Mulkamala, and Mohammed Zubair, A Standards-Based Approach for Supporting Dynamic Access Policies for a Federated Digital Library, In *Proceedings of the 8th International Conference on Asian Digital Libraries (ICADL 2005)*, December 2005, Bangkok, Thailand.

Journal and Magazine Articles

1. Frank McCown, Catherine C. Marshall, and Michael L. Nelson, Why Websites Are Lost (and How They're Sometimes Found), *Communications of the ACM*, Nov 2009, Vol. 52, No. 11, p. 141-145.
2. Frank McCown, Hannes Kulovits, and Andreas Rauber. Report on the First International Workshop on Innovation in Digital Preservation (InDP 2009), *D-Lib Magazine*, July/August 2009, Vol. 15, No. 7/8.
3. Michael L. Nelson, Frank McCown, Joan A. Smith, and Martin Klein. Using the Web Infrastructure to Preserve Web Pages, *International Journal on Digital Libraries*, July 2007, Vol. 6, No. 4, p. 327-349.
4. Joan A. Smith, Frank McCown, and Michael L. Nelson, Observed Web Robot Behavior on Decaying Web Subsites, *D-Lib Magazine*, February 2006, Vol. 12, No. 2.
5. Frank McCown, Xiaoming Liu, Michael L. Nelson, and Mohammed Zubair, Search Engine Coverage of the OAI-PMH Corpus, *IEEE Internet Computing*, March/April 2006, Vol. 10, No. 2, pp. 66-73.

Book Chapters

1. Martin Klein, Frank McCown, Joan A. Smith, and Michael L. Nelson, How much preservation do I get if I do absolutely nothing? Using the Web Infrastructure for digital preservation. *Content Engineering: Konzepte, Technologien und Anwendungen in der Medienproduktion*, ISBN: 978-3-940019-08-0, 2007, p. 71-87.

2. Frank McCown, Joan A. Smith, Michael L. Nelson, and Johan Bollen, Reconstructing Websites for the Lazy Webmaster. *Dynamics of Search Engines: An Introduction*, ISBN: 81-314-0679-2, 2007, p. 81-112.

Other

1. Frank McCown, *Remoting with GUIs*, The Code Project, May 2005.
2. Frank McCown, *Development of a Remote Object Webcam Controller (ROWC) with CORBA and JMF*, Masters Thesis, University of Arkansas at Little Rock, 2002.

Presentations (Invited)

1. "Lazy Preservation, or Where Did My Website Go?", Computing Seminar, Harding University, Searcy, AR (11/29/07)
2. "Academic Research & the Internet Archive Web Archives. How to Mine Analyze Ten+ Years of Virtual Activity," with Kris Carpenter and Brad Tofel, Tutorial at JCDL 2007, Vancouver, B. C., Canada (6/19/07)
3. "Thinking Differently About Web Page Preservation," with Joan Smith and Michael L. Nelson, NDIIPP briefing at the Library of Congress, Washington, D.C. (6/29/06)
4. "Remoting with GUIs," WeProgram.NET meeting, Newport News, Virginia (10/11/05)
5. "Reconstructing Websites for the Lazy Webmaster," Computing Seminar, Harding University, Searcy, AR (9/29/05)
6. "Using CORBA for Surveillance and Medical Procedures," Johnson Space Center, Houston, TX (8/02)