

825 Calle Mejia Apt. 224
Santa Fe, NM 87501
United States of America
+1 (757) 560 7909

✉ shawnmorganjones@acm.org
🌐 <http://www.shawnmjones.org>
📄 orcid.org/0000-0002-4372-870X



Shawn M. Jones

Education

- 2015 **PhD Computer Science**, *Old Dominion University*, Norfolk, VA, (Expected 2019).
- 2010 **MSc Computer Science**, *Old Dominion University*, Norfolk, VA.
- 1994 **BSc Computer Science**, *Old Dominion University*, Norfolk, VA.

Masters thesis

- title *Avoiding Spoilers on MediaWiki Fan Sites Using Memento*
- advisor Michael L. Nelson
- description A variety of fan-based wikis about episodic fiction exist on the World Wide Web. Unfortunately, some fans who may be behind on their viewing may run the risk of encountering spoilers. Here I detail the use of the current heuristic for viewing prior versions of web pages and suggest a new heuristic for use for avoiding spoilers. In addition to analysis of the current state of affairs, I also include the results of two studies showing that users using the Wayback Machine to avoid spoilers have a 0.66 probability of encountering spoilers with the current heuristic. In closing, I detail a reference implementation that uses the new heuristic directly on wikis, which already have access to all previous versions.

Languages

- English **Native** *Mother Tongue*
- Spanish **Limited** *Some practice, all work performed in English*

Experience

2013

Graduate Research Assistant, *Old Dominion University Computer Science Department*, Norfolk, VA, USA.

Digital Preservation Research

- explored the relationships between wikis and web archives
- collaborated to develop a mathematical model of the Memento Framework
- studied the effects of changes in web archiving strategies on wikis
- extended MediaWiki using PHP and MySQL to support RFC 7089, the Memento extensions to HTTP
- implemented Strategy, Template Method, Factory Method, and Mediator design patterns to remove duplication and otherwise improve code
- utilized REST interfaces, JSON, and XML for retrieving information via web services
- developed screen scraping and web crawling technologies using Python and BeautifulSoup
- developed a model for detecting spoilers in wiki fan sites
- evaluated Storytelling tools for use in web archive summarization
- represented group at academic conferences

2015

2017

Graduate Research Assistant, *Los Alamos National Laboratory*, Los Alamos, NM, USA.

Digital Preservation Research

- explored the intersection of scholarly communications, social networking, and web archiving
- evaluated the use of research notebooks such as Jupyter and Beaker Notebook
- utilized Python celery library for multiprocessing of large data sets
- developed the Memento client Python library for easily accessing archived web pages
- explored the use of text similarity measures such as cosine similarity and simhash
- evaluated web archiving tools such as Heritrix and Webrecorder.io
- evaluated publisher websites for potential linked data as part of the Signposting initiative
- represented group at academic conferences

1997

2015

Computer Scientist, *SPAWAR Systems Center, Atlantic*, Norfolk, VA, USA.
Software Engineer and Systems Administration.

- Led several software projects, working with project managers and technical leads
- Led a team of engineers to develop solutions for automated deployment and software dependency analysis
- Created a web-based application using MySQL and Python for recording of build statistics for software development
- Wrote software release system in Python
- Used Subversion and Git extensively for source control, including the creation of hook scripts
- Wrote BASH, Python, and Ant scripts that perform automated deployment of Java web applications
- Served as Build Manager for a 50+ developer software project
- Architected Maven POMs, Ant scripts, and Makefiles for 100,000+ line software project
- Wrote Python scripts for generating reports from Atlassian JIRA's REST interface
- Wrote Python scripts to derive Java library dependency information for multiple versions of JBoss
- Wrote Maven plugins in Java
- Created installation packages for a variety of systems using tools such as RPM and InstallShield
- Architected build system for continuous integration using Subversion, Hudson/Jenkins, and Nexus for a 50+ developer project
- Utilized JavaDocs and Doxygen for source code documentation generation
- Wrote Python scripts that process library output from multiple projects, cross-references them, and produce Excel spreadsheets
- Ported 2005 version of C antivirus application Clamav to 1990s version of SCO Unixware
- Ported Apache web server, Samba, and GNU utilities to 1992 version of HP/UX
- Configured Hibernate for database abstraction to connect to Hypersonic, Sybase, PostgreSQL, MySQL, and Oracle as part of aircraft maintenance application
- Wrote security exploits in C
- Maintained snort as a Network Intrusion Detection System
- Employed the eEye Retina and Tenable Nessus vulnerability scanners
- Performed forensics on user workstations to assist the Naval Criminal Investigative Services (NCIS)

Certifications

2013

Defense Acquisition University, *Systems Engineering*, DAWIA Level 3.

2010

CompTIA, *Linux+*, #COMP001020104110.

2008

Defense Acquisition University, *Systems Engineering*, DAWIA Level 2.

2008

International Information System Security Certification Consortium (ISC)², *Certified Information Systems Security Professional (CISSP)*, #307483.

2007

Old Dominion University, *Professional Certificate in Systems Engineering*.

2007

Defense Acquisition University, *Systems Engineering*, DAWIA Level 1.

2003

Cisco, *Cisco Certified Network Associate (CCNA)*, #CSCO10655095.

2000

Naval Technical Training Center, *A-531-0009: Information Systems Security*.

1999

Microsoft, *Microsoft Certified Systems Engineer (MCSE)*.

Skills

- o Python, Java, C, C++, PERL, BASH
- o MySQL, Redis
- o Red Hat Enterprise Linux, Mac OSX, Ubuntu, Microsoft Windows, HP/UX
- o Make, Ant, Maven

Masters Thesis

2015

Jones, Shawn M. "Avoiding Spoilers on MediaWiki Fan Sites Using Memento". MSc. Norfolk, VA, United States of America: Old Dominion University. URL: http://digitalcommons.odu.edu/computerscience_etds/1/.

Journal Publications

2016

Jones, Shawn M., Michael L. Nelson, and Herbert Van de Sompel. "Avoiding spoilers: wiki time travel with Sheldon Cooper". In: *International Journal on Digital Libraries*, pp. 1–17. URL: <http://dx.doi.org/10.1007/s00799-016-0200-8>.

2016

Jones, Shawn M., Herbert Van de Sompel, Harihar Shankar, Martin Klein, Richard Tobin, and Claire Grover. "Scholarly Context Adrift: Three out of Four URI References Lead to Changed Content". In: *PLOS ONE* 11.12, pp. 1–32. URL: <http://dx.doi.org/10.1371/journal.pone.0167475>.

Conference Publications

2016

Sompel, Herbert Van de, Martin Klein, and Shawn M. Jones. "Persistent URIs Must Be Used To Be Persistent". In: *Proceedings of the 25th International Conference Companion on World Wide Web. WWW '16 Companion*. Montréal, Québec, Canada: International World Wide Web Conferences Steering Committee, pp. 119–120. URL: <http://dx.doi.org/10.1145/2872518.2889352>.

Technical Reports

2016

Jones, S. M. and H. Shankar. *Rules of Acquisition for Mementos and Their Content*. Tech. rep. Los Alamos National Laboratory. arXiv: 1602.06223 [cs.DL]. URL: <http://arxiv.org/abs/1602.06223>.

2015

Jones, Shawn M. and Michael L. Nelson. *Avoiding Spoilers in Fan Wikis of Episodic Fiction*. Tech. rep. arXiv:1506.0. Old Dominion University, p. 18. arXiv: 1506.06279 [cs.DL]. URL: <http://arxiv.org/abs/1506.06279>.

2014

Jones, Shawn M., Michael L. Nelson, Harihar Shankar, and Herbert Van de Sompel. *Bringing Web Time Travel to MediaWiki: An Assessment of the Memento MediaWiki Extension*. Tech. rep. arXiv:1406.3. Old Dominion University, p. 23. arXiv: 1406.3876 [cs.DL]. URL: <http://arxiv.org/abs/1406.3876>.

Other

2014

Jones, Shawn M. "Reconstructing the past with MediaWiki". WikiConference USA. URL: <http://www.slideshare.net/shawnmjones/reconstructing-the-past-with-media-wiki-35333484>.

2014

Jones, Shawn M. "Using the Memento MediaWiki Extension to Avoid Spoilers". WikiConference USA. URL: <http://www.slideshare.net/shawnmjones/using-the-memento-mediawiki-extension-to-avoid-spoilers-35333526>.

2013

Jones, Shawn M. "A Brief Introduction to Test-Driven Development". Old Dominion University Chapter of the Association for Computing Machinery. URL: <http://www.slideshare.net/shawnmjones/tdd-36889681>.

2013

Jones, Shawn M. "Continuous Integration: Finding Problems Soonest". Defense Acquisition University. URL: <http://www.slideshare.net/shawnmjones/continuous-integration-36889803>.

Professional Society Memberships

- o Association for Computing Machinery (ACM)
- o International Information System Security Certification Consortium (ISC)²

References

Available upon request.