# **Curriculum Vitae**

# EMMET JAMES WHITEHEAD, JR.

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### **EDUCATION**

Ph.D. Information and Computer Science, University of California, Irvine, September, 2000. Dissertation: <u>An Analysis of the Hypertext Versioning Domain</u>

M.S. Information and Computer Science, University of California, Irvine, Dec. 1994.

B.S. Electrical Engineering, Rensselaer Polytechnic Institute, May 1989.

### WORK EXPERIENCE

**Professor, University of California, Santa Cruz, July 2000-present.** Department Chair, July 2010-present. Performed research and teaching as a tenure-track faculty member in the Department of Computer Science. Taught classes on Software Engineering and Computer Games at the graduate and undergraduate level. Supervised both masters and doctoral students in the pursuit of their thesis work. Research focuses include software repository mining, software bug prediction, level design in computer games, procedural content generation for games, design of social network games, software engineering and games, Internet protocol design, and hypertext versioning.

**Chair,** <u>Web Distributed Authoring and Versioning (WebDAV)</u> Working Group, <u>Internet Engineering Task Force</u>, March **1997-March 2004.** Founded and led this working group to enable Web-based remote collaborative authoring and versioning tools to be broadly interoperable. Assembled a broad coalition of participants from industry and academia, including Microsoft, Netscape, IBM, Novell, Xerox, Rational, Merant, and OTI. Developed the WebDAV Distributed Authoring Protocol, extensions to the Hypertext Transfer Protocol (HTTP) to support remote collaborative authoring, now supported by such industry-leading applications and servers as Office 2000, Go Live, Dreamweaver, Photoshop, Acrobat, Internet Explorer, Apache, Internet Information Services, Exchange, and many others. Instrumental in the formation of the follow-on <u>Delta-V</u> (versioning and configuration management) working group within the IETF.

**Research Assistant, University of California, Irvine, 1993-2000.** Performed research for DARPA research projects in the areas of remote collaborative authoring, open hypertext, hypertext versioning, software architecture, and software environments. Participated on several DARPA grant-writing teams.

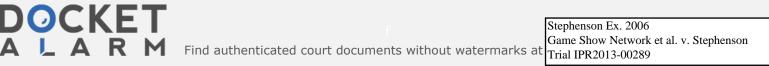
**Teaching Assistant, University of California, Irvine, 1992-1993.** Assisted in the teaching of the undergraduate level Software Engineering course, and the Software Engineering Project course. Consistently earned excellent student reviews.

**Engineer, Raytheon Equipment Division, 1989-1992.** Wrote firmware in C and Ada for the German Civilian Air Traffic Control (ATC) System (DERD), and for a prototype Microwave Airplane Landing System (MLS). Adapted air traffic control software to create a marketing demonstration of a vessel traffic control system. Developed prototype touch panel displays for use with the DERD system. Project highlights include:

- Wrote firmware using the Spark safety-critical subset of Ada for an R3000 to monitor the control electronics of a MLS in realtime. Wrote a C program to test a Phase Shifter Controller board. Debugged system hardware to the component level while performing integration.
- Wrote a multi-screen textual user interface for a real-time multiprocessor (four 68020 single board computers connected via a VME bus) simulator of nine radars, six direction finders, and a flight plan information system for the DERD ATC system.

### PEER REVIEWED JOURNAL PUBLICATIONS

- 1. Shivkumar Shivaji, E. James Whitehead, Jr., Ram Akella, Sunghun Kim, "<u>Reducing Features to Improve Code Change Based</u> <u>Bug Prediction</u>." *IEEE Transactions on Software Engineering*, to appear.
- Cillian Cmith Tim Whitehood Michael Maters "Tanagra: Deactive Dlanning and Constraint Colving for Mived Initiative Level



September, 2011, pp. 201-215.

- 3. Chris Lewis, Jim Whitehead, "Repairing Games at Runtime or, How We Learned to Stop Worrying and Love Emergence" *IEEE Software*, Vol. 28, No. 5, September/October 2011, pp. 53-59.
- Gillian Smith, Jim Whitehead, Michael Mateas, Mike Treanor, Jameka March, Mee Cha, "Launchpad: A Rhythm-Based Level Generator for 2-D Platformers" IEEE Transactions on Computational Intelligence and AI in Games (TCIAIG), Vol. 3, No. 1, March 2011.
- 5. Kai Pan, Sunghun Kim, E. James Whitehead, Jr., "<u>Toward an Understanding of Bug Fix Patterns</u>" *Empirical Software Engineering*, Vol. 14, No. 3, June 2009.
- Sunghun Kim, E. James Whitehead, Jr., Yi Zhang, "<u>Classifying Software Changes: Clean or Buggy?</u>" *IEEE Transactions on Software Engineering*, vol. 34, no. 2, March/April 2008, pp. 181-196.
- 7. E. James Whitehead, Jr., Yaron Y. Goland, "<u>The WebDAV Property Design</u>" Software, Practice and Experience, vol 34, 2004, pp 135-161.
- 8. E. James Whitehead, Jr. "<u>A Proposed Curriculum for a Masters in Web Engineering</u>" *Journal of Web Engineering*, Vol. 1, No. 1, October, 2002, pp. 18-22.
- 9. Kenneth M. Anderson, Richard N. Taylor, E. James Whitehead, Jr. "<u>Chimera: Hypertext for Heterogeneous Software</u> <u>Development Environments.</u>" *ACM Transactions on Information Systems*, Vol. 18, No. 3, July 2000, pages 211-245.
- Roy T. Fielding, E. James Whitehead, Jr., Kenneth M. Anderson, Gregory A. Bolcer, Peyman Oreizy, Richard N. Taylor "<u>Web-Based Development of Complex Information Products</u>." *Communications of the ACM*, Vol. 41, No. 8, August, 1998, pages 84-92.
- 11. Kenneth M. Anderson, Richard N. Taylor, E. James Whitehead, Jr. "<u>A Critique of the Open Hypermedia Protocol</u>." *Journal of Digital Information*, Vol. 1, No. 2, December, 1997.
- Richard N. Taylor, Nenad Medvidovic, Kenneth M. Anderson, E. James Whitehead, Jr., Jason E. Robbins, Kari A. Nies, Peyman Oreizy, and Deborah L. Dubrow "<u>A Component and Message-Based Architectural Style for GUI Software</u>." *IEEE Transactions* on Software Engineering, Vol. 22, No. 6, June, 1996, pages 390-406.

### **BOOKS, EDITED VOLUMES, AND BOOK CHAPTERS**

- 1. Ivan Mistrík, John Grundy, André van der Hoek, Jim Whitehead (editors), <u>Collaborative Software Engineering</u>, Springer, 2010. ISBN 978-3642102936.
- 2. Jim Whitehead, Ivan Mistrík, John Grundy, André van der Hoek, "Collaborative Software Engineering: Concepts and Techniques." In *Collaborative Software Engineering*, Springer, 2010, pp. 1-34.
- 3. Ivan Mistrík, John Grundy, André van der Hoek, Jim Whitehead, "Collaborative Software Engineering: Challenges and Prospects." In *Collaborative Software Engineering*, Springer, 2010, pp. 389-404.

### PEER REVIEWED CONFERENCE AND WORKSHOP PUBLICATIONS

Acceptance rates, where known, shown in parenthesis.

- 1. Gillian Smith, Alexei Othenin-Girard, Jim Whitehead, Noah Wardrip-Fruin. "PCG-Based Game Design: Creating Endless Web." *Proceedings of the 2012 Foundations of Digital Games Conference (FDG 2012)*, Raleigh, NC, USA, May 30 June 1, 2012.
- 2. Chris Lewis, Noah Wardrip-Fruin, Jim Whitehead. "Motivational Game Design Patterns of 'Ville Games." In *Proceedings of the 2012 Foundations of Digital Games Conference (FDG 2012)*, Raleigh, NC, USA, May 30 June 1, 2012.
- 3. Gabriel Rivera, Kenneth Hullett, Jim Whitehead, "Enemy NPC Design Patterns in Shooter Games." *Proceedings of the Workshop on Design Patterns in Games (DPG 2012)*, held with FDG 2012, Raleigh, NC, USA, May 30 June 1, 2012.
- 4. Robert Giusti, Kenneth Hullett, Jim Whitehead, "Weapon Design Patterns in Shooter Games." *Proceedings of the Workshop on Design Patterns in Games (DPG 2012)*, held with FDG 2012, Raleigh, NC, USA, May 30 June 1, 2012.
- Gillian Smith, Ryan Anderson, Brian Kopleck, Zach Lindblad, Lauren Scott, Adam Wardell, Jim Whitehead, Michael Mateas, "Situating Quests: Design Patterns for Quest and Level Design in Role-Playing Games." *Fourth International Conference on Interactive Digital Storytelling (ICIDS 2011)*, Vancouver, Canada, November 28-December 1, 2011. Lecture Notes in Computer Science 7069 Springer, pp. 326-329.
- 6. Chris Lewis, Jim Whitehead, "The Whats and Whys of Games and Software Engineering", in *Proceedings of the Games and Software Engineering workshop (GAS 2011)*, co-located with the 2011 Int'l Conference on Software Engineering (ICSE 2011), Honolulu, Hawaii, USA, May 21, 2011.
- Gillian Smith, Elaine Gan, Alexei Othenin-Girard, Jim Whitehead, "PCG-Based Game Design: Enabling New Play Experiences through Procedural Content Generation", in *Proceedings of the Second Int'l Workshop on Procedural Content Generation in Games (PCGames 2011)*, co-located with the 2011 Foundations of Digital Games (FDG 2011) conference, Bordeaux, France, June 28, 2011.
- Caitlin Sadowski, Chris Lewis, Zhongpeng Lin, Xiaoyan Zhu, E. James Whitehead, Jr., "<u>An Empirical Analysis of the FixCache Algorithm</u>" *Proceedings of the 8th Working Conference on Mining Software Repositories (MSR 2011)*, Honolulu, Hawaii, USA, May 21-22, 2011. (*Short paper, 35%*)
- 9. Gillian Smith, Jim Whitehead, Michael Mateas, "<u>Tanagra: A Mixed-Initiative Level Design Tool.</u>" *Proceedings of the 5th International Conference on the Foundations of Digital Games (FDG 2010)*, Monterey, California, USA, June 19-21, 2010.
- 10. Chris Lewis, Jim Whitehead, Noah Wardrip-Fruin, "<u>What Went Wrong: A Taxonomy of Video Game Bugs.</u>" Proceedings of the 5th International Conference on the Foundations of Digital Cames (FDC 2010). Monterey, California, USA, June 10-21, 2010.



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Foundations of Digital Games (FDG 2010), Monterey, California, USA, June 19-21, 2010.

- 12. Gillian Smith, Jim Whitehead, "<u>Analyzing the Expresive Range of a Level Generator.</u>" *Proceedings of the Workshop on Procedural Content Generation in Games (Co-located with FDG 2010)*, Monterey, California, USA, June 18, 2010.
- 13. Jim Whitehead, "<u>Toward Procedural Decorative Ornamentation in Games.</u>" *Proceedings of the Workshop on Procedural Content Generation in Games (Co-located with FDG 2010)*, Monterey, California, USA, June 18, 2010 (*short paper*).
- 14. Chris Lewis, Jim Whitehead, "<u>Runtime Repair of Software Faults Using Event-Driven Monitoring.</u>" *Proceedings of the 2010 International Conference on Software Engineering (ICSE 2010)*, Cape Town, South Africa, May 2-10, 2010 (formal research demonstration paper, <u>slides</u>, <u>poster</u>).
- 15. Shivkumar Shivaji, E. James Whitehead, Jr., Ram Akella, Sunghun Kim, "<u>Reducing Features to Improve Bug Prediction.</u>" *Proceedings of the 24th IEEE/ACM International Conference on Automated Software Engineering (ASE 2009)*, Auckland, New Zealand, Nov. 16-20, 2009.
- 16. Sunghun Kim, Shivkumar Shivaji, E. James Whitehead, Jr., "<u>Kenyon-Web: Reconfigurable Web-based Feature Extractor</u>." *Proceedings of the 17th IEEE International Conference on Program Comprehension (ICPC '09)*, Vancouver, BC, Canada, May 17-19, 2009. (*Tool demonstration paper.*)
- 17. Gillian Smith, Mike Treanor, Jim Whitehead, Michael Mateas, "<u>Rhythm-Based Level Generation for 2D Platformers</u>." Proceedings of the 2009 Int'l Conference on the Foundations of Digital Games (FDG 2009), Orlando, FL, April 26-30, 2009.
- 18. Gillian Smith, Mee Cha, Jim Whitehead, "<u>A Framework for Analysis of 2D Platformer Levels</u>." *Proceedings of ACM SIGGRAPH Sandbox Symposium 2008*, Los Angeles, CA, August 9-10, 2008.
- 19. Guozheng Ge, E. James Whitehead, Jr., "<u>Rhizome: A Feature Modeling and Generation Platform</u>." *Proceedings of the 23rd IEEE/ACM International Conference on Automated Software Engineering (ASE 2008)*, L'Aquila, Italy, September 15-19, 2008. (*short paper*)
- Sangeetha Sudhakrishnan, Janaki T. Madhavan, E. James Whitehead, Jr., Jose Renau, "<u>Understanding Bug Fix Patterns in</u> <u>Verilog</u>." *Proceedings of the 5th Working Conference on Mining Software Repositories (MSR 2008)*, Leipzig, Germany, May 10-11, 2008. (short paper, <u>longer version</u>)
- 21. Jim Whitehead, "Introduction to Game Design in the Large Classroom." Proceedings of the Third Annual Microsoft Academic Days Conference on Game Development in Computer Science Education (GDCSE 2008), Miami, Florida, February 27-March 3, 2008. (25%)
- 22. Janaki T. Madhavan, E. James Whitehead, Jr., "<u>Predicting Buggy Changes Inside an Integrated Development Environment</u>." *Proceedings of the Eclipse Technology Exchange Workshop at OOPSLA 2007 (ETX 2007)*, Montréal, Québec, Canada, October 21, 2007.
- 23. Sunghun Kim, Thomas Zimmermann, E. James Whitehead, Jr., Andreas Zeller, "<u>Predicting Faults from Cached History</u>." *Proceedings of the 29th International Conference on Software Engineering (ICSE 2007)*, Minneapolis, Minnesota, USA, May 20-26, 2007. (15%) ACM SIGSOFT Distinguished Paper Award winner [Video presentation]
- 24. Peter Bergstrom, E. James Whitehead, Jr., "<u>CircleView: Scalable Visualization and Navigation of Citation Networks</u>." *Proceedings of the 2006 Symposium on Interactive Visual Information Collections and Activity (IVICA 2006)*, College Station, Texas, October 20-22, 2006.
- 25. Sunghun Kim, Kai Pan, E. James Whitehead, Jr., "<u>Memories of Bug Fixes</u>." *Proceedings of the Fourteenth ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE 2006)*, Portland, Oregon, November 5-11, 2006. (20%)
- 26. Sunghun Kim, E. James Whitehead, Jr., Jennifer Bevan, "<u>Properties of Signature Change Patterns</u>." *Proceedings of ICSM 2006, the 22nd IEEE International Conference on Software Maintenance*, Philadelphia, PA, September 24-27, 2006. (30%)
- 27. Kai Pan, Sunghun Kim, E. James Whitehead, Jr., "<u>Bug Classification Using Program Slicing Metrics</u>." *Proceedings of the Sixth IEEE International Workshop on Source Code Analysis and Manipulation (SCAM 2006)*, Philadelphia, PA, September 27-29, 2006. (41%)
- Sunghun Kim, Thomas Zimmermann, Kai Pan, E. James Whitehead, Jr., "<u>Automatic Identification of Bug-Introducing</u> <u>Changes</u>." *Proceedings of ASE 2006, the 21st IEEE/ACM International Conference on Automated Software Engineering*, Tokyo, Japan, September 18-22, 2006. (18%)
- 29. Sunghun Kim, Kai Pan, E. James Whitehead, Jr., "Micro Pattern Evolution." Proceedings of MSR 2006: International Workshop on Mining Software Repositories, Shanghai, China, May 22-23, 2006. (long paper, 30%)
- 30. Thomas Zimmermann, Sunghun Kim, Andreas Zeller, É. James Whitehead, Jr., "<u>Mining Version Archives for Co-changed Lines</u>." *Proceedings of MSR 2006: International Workshop on Mining Software Repositories*, Shanghai, China, May 22-23, 2006. (*short paper, 62%*)
- 31. Sunghun Kim, Thomas Zimmermann, Miryung Kim, Ahmed Hassan, Audris Mockus, Tudor Girba, Martin Pinzger, E. James Whitehead, Jr., Andreas Zeller, "<u>TA-RE: An Exchange Language for Mining Software Repositories</u>." *Proceedings of MSR 2006: International Workshop on Mining Software Repositories*, Shanghai, China, May 22-23, 2006. (*short paper, 62%*)
- Sunghun Kim, E. James Whitehead, Jr., "<u>How Long Did It Take to Fix Bugs?</u>." *Proceedings of MSR 2006: International Workshop on Mining Software Repositories* (an MSR 2006 Mining Challenge report), Shanghai, China, May 22-23, 2006.
- Sunghun Kim, Kai Pan, E. James Whitehead, Jr., "<u>When Functions Change Their Names: Automatic Detection of Origin</u> <u>Relationships</u>." *Proceedings of the 12th Working Conference on Reverse Engineering (WCRE 2005)*, November 8-11, 2005, Pittsburgh, Pennsylvania, pp. 143-152. (37%)
- 34. Kai Pan, E. James Whitehead, Jr., Guozheng Ge, "<u>Textual and Behavioral Views of Function Changes</u>." *Proceedings of the 3rd International Workshop on Traceability in Emerging Forms of Software Engineering (TEFSE'05)*, November 2005, Long Beach, California, pp. 8-13.
- 35. Guozheng Ge, E. James Whitehead, Jr., "Bamboo: An Architecture Modeling and Code Generation Framework for



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Engineering, November 7-11, 2005, Long Beach, California, pp. 427-428. (Formal Tool Demonstration)

- Jennifer Bevan, E. James Whitehead, Jr., Sunghun Kim, Michael Godfrey, "Facilitating Software Evolution with Kenyon." Proceedings of the 2005 European Software Engineering Conference and 2005 Foundations of Software Engineering (ESEC/FSE 2005), September 5-9, 2005, Lisbon, Portugal, pp. 177-186. (16%)
- 37. Sunghun Kim, E. James Whitehead, Jr., Jennifer Bevan, "<u>Analysis of Signature Change Patterns</u>." *Proceedings of the 2nd Int'l Workshop on Mining Software Repositories (MSR 2005)*, May 17, 2005, St. Louis, Missouri, pp. 64-68.
- 38. E. James Whitehead, Jr., Guozheng Ge, Kai Pan, "<u>Automatic Generation of Hypertext System Repositories, A Model Driven Approach</u>." *Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (Hypertext 2004)*, August 9-13, 2004, Santa Cruz, California, pp. 205-214. *(23%)*
- 39. Kai Pan, E. James Whitehead, Jr., Guozheng Ge, "<u>Hypertext Versioning for Embedded Link Models</u>." *Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (Hypertext 2004)*, August 9-13, 2004, Santa Cruz, California, pp. 195-204. (23%)
- 40. Sunghun Kim, E. James Whitehead, Jr., "Properties of Academic Paper References." Proceedings of the Fifteenth ACM Conference on Hypertext and Hypermedia (Hypertext 2004), August 9-13, 2004, Santa Cruz, California, pp. 44-45. (short paper, 45%)
- 41. Sunghun Kim, Mark Slater, E. James Whitehead, Jr., "<u>WebDAV-based Hypertext Annotation and Trail System</u>." *Proceedings of the Fifteenth ACM Confereence on Hypertext and Hypermedia (Hypertext 2004)*, August 9-13, 2004, Santa Cruz, California, pp. 87-88. (*short paper, 45%*)
- 42. Sunghun Kim, Kai Pan, E. James Whitehead, Jr., "<u>WebDAV based Open Source Collaborative Development Environment</u>." In *Proceedings of the 4th Workshop on Open Source Software Engineering*, held in conjunction with ICSE 2004, May 25, 2004, Edinburgh, Scotland, pp. 54-57.
- Sunghun Kim, Kai Pan, Elias Sinderson, E. James Whitehead, Jr., "<u>Architecture and Data Model of a WebDAV-based</u> <u>Collaborative System</u>." In *Proceedings of the 2004 Collaborative Technologies Symposium (CTS'04)*, held in conjunction with the 2004 Western MultiConference, January 18-21, 2004, San Diego, California, pp. 48-55.
- 44. Jennifer Bevan, E. James Whitehead, Jr., "<u>Identification of Software Instabilities</u>." In *Proceedings of the Tenth Working Conference on Reverse Engineering (WCRE 2003)*, Vancouver, British Columbia, Canada, November 13-16, 2003, pp. 134-145.
- 45. Donna C. Stidolph, James Whitehead, "<u>Managerial Issues for the Consideration and Use of Formal Methods.</u>" In *Proceedings* of FME 2003, the Twelfth International FME Symposium, Pisa, Italy, September 8-14, 2003, pp. 170-186. (30%)
- E. James Whitehead, Jr., Dorrit Gordon, "<u>Uniform Comparison of Configuration Management Data Models</u>." In *Proceedings of* 11th International Workshop on Software Configuration Management (SCM-11), LNCS 2649, Portland, Oregon, May 9-10, 2003, pp. 70-85.
- 47. Dorrit Gordon, E. James Whitehead, Jr., "<u>Containment Modeling of Content Management Systems</u>." In *Proceedings of Metainformatics Symposium 2002 (MIS'02)*, LNCS 2641, Esbjerg, Denmark, August 7-10, 2002, pp. 76-89.
- 48. E. James Whitehead, Jr., "<u>Uniform Comparison of Data Models Using Containment Modeling</u>." In *Proceedings of Hypertext'02, the 13th ACM Conference on Hypertext and Hypermedia*, College Park, MD, June 11-15, 2002, pp. 182-191. (31%) Winner of Douglas Engelbart award for best paper.
- 49. E. James Whitehead, Jr., "Design Spaces for Link and Structure Versioning." In Proceedings of Hypertext'01, the 12th ACM Conference on Hypertext and Hypermedia, Århus, Denmark, August 14-18, 2001, pages 195-204. (27%)
- Scott Banachowski, Jim Whitehead, "<u>An Observation of Fine-Grain Use Patterns for Two Configuration Management Tools</u>." In *Proceedings of SCM10, the 10th International Workshop on Software Configuration Management*, held with ICSE 2001, Toronto, Canada, May 14-15, 2001.
- 51. E. James Whitehead, Jr., "<u>A Proposed Curriculum for a Masters in Web Engineering</u>." In *Proceedings of the Fourth Workshop* on Web Engineering, held with WWW10, Hong Kong, May 1, 2001.
- E. James Whitehead, Jr., Yaron Y. Goland, "WebDAV: A network protocol for remote collaborative authoring on the Web." In Proceedings of the Sixth European Conference on Computer Supported Cooperative Work (ECSCW'99), Copenhagen, Denmark, September 12-16, 1999, pages 291-310. (24%)
- E. James Whitehead, Jr. "Goals for a Configuration Management Network Protocol." In Proceedings of the Ninth Int'l Symposium on System Configuration Management (SCM-9), LNCS 1675, Toulouse, France, September 5-7, 1999, pages 186-203.
- 54. E. James Whitehead, Jr. "Control Choices and Network Effects in Hypertext Systems." In Proceedings of Hypertext'99, The 10th ACM Conference on Hypertext and Hypermedia, Darmstadt, Germany, February 21-25, 1999, pages 75-82. Engelbart best paper award nominee. (32%)
- 55. E. James Whitehead, Jr. "Control Choices and Network Effects in Hypertext Systems." In *Proceedings of the <u>4th Workshop on</u>* <u>Open Hypermedia Systems</u>, held with Hypertext'98, Pittsburgh, PA, June 20-21, 1998.
- 56. E. James Whitehead, Jr. "An Architectural Model for Application Integration in Open Hypermedia Environments." In
- *Proceedings of Hypertext'97, The Eighth ACM Conference on Hypertext*. Southampton, UK, April 6-11, 1997, pages 1-12. 57. Uffe Kock Wiil, E. James Whitehead, Jr. "Interoperability and Open Hypermedia Systems." In *Proceedings of the <u>3rd</u>*
- Workshop And Den Hypermedia Systems, held with Hypertext'97. Southampton, UK, April 6-7, 1997.
- 58. Nenad Medvidovic, Richard N. Taylor, E. James Whitehead, Jr. "Formal Modeling of Software Architectures at Multiple Levels of Abstraction ." In Proceedings of the California Software Symposium 1996. Los Angeles, CA, April, 1996, pages 16-27.
- E. James Whitehead, Jr., "<u>SCM and Hypertext Versioning: A Compelling Duo</u>." Position paper for *Sixth International Workshop* on Software Configuration Management, held with ICSE18. Berlin, Germany, March, 1996.

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Approach." In *Proceedings of the <u>2nd Workshop on Open Hypermedia Systems</u>, held with Hypertext'96. Washington, DC, March, 1996, pages 81-86.* 

- 61. Richard N. Taylor, Nenad Medvidovic, Kenneth M. Anderson, E. James Whitehead, Jr., and Jason E. Robbins "<u>A Componentand Message-Based Architectural Style for GUI Software</u>." In *Proceedings of the Seventeenth International Conference on Software Engineering*. Seattle, WA, April, 1995, pages 295-304. (18%)
- 62. E. James Whitehead, Jr., Jason E. Robbins, Nenad Medvidovic, Richard N. Taylor "<u>Software Architecture: Foundation of a</u> <u>Software Component Marketplace</u>." In *Proceedings of the First International Workshop on Architectures for Software Systems*, held in cooperation with ICSE-17. Seattle, WA, April, 1995, pages 276-282.
- 63. Kenneth M. Anderson, Richard N. Taylor, and E. James Whitehead, Jr., "<u>Chimera: Hypertext for Heterogeneous Software</u> <u>Environments</u>." In *Proceedings of the 1994 European Conference on Hypermedia Technology, ECHT'94*. Edinburgh, Scotland, September, 1994, pages 94-107.
- E. James Whitehead, Jr., Kenneth M. Anderson, Richard N. Taylor, "<u>A Proposal for Versioning Support for the Chimera System</u>" In <u>Proceedings of the Workshop on Versioning in Hypertext Systems</u>, held with ECHT'94. Edinburgh, Scotland, September, 1994, pages 45-54.

### **INTERNET STANDARDS**

- G. Clemm, J. Crawford, J. Reschke, J. Whitehead, "<u>Binding Extensions to Web Distributed Authoring and Versioning</u> (<u>WebDAV</u>)." IBM, IBM Research, greenbytes, UC Santa Cruz, Internet Experimental Request for Comments 5842. April, 2010.
- 2. J. Whitehead, G. Clemm, J. Reschke, "<u>Web Distributed Authoring and Versioning (WebDAV) Redirect Reference Resources</u>." UC Santa Cruz, IBM, greenbytes, Internet Experimental Request for Comments 4437. March, 2006.
- 3. G. Clemm, J. F. Reschke, E. Sedlar, J. Whitehead, "<u>Web Distributed Authoring and Versioning (WebDAV) Access Control</u> <u>Protocol</u>." IBM, greenbytes, Oracle, UC Santa Cruz, Internet Proposed Standard Request for Comments 3744. May 2004.
- J. Whitehead, J. Reschke, "<u>Web Distributed Authoring and Versioning (WebDAV) Ordered Collections Protocol</u>." U.C. Santa Cruz, greenbytes, Internet Proposed Standard Request for Comments 3648. December 2003.
- 5. G. Clemm, J. Amsden, T. Ellison, C. Kaler, J. Whitehead, "<u>Versioning Extensions to WebDAV</u>." Rational, IBM, Microsoft, U.C. Santa Cruz, Internet Proposed Standard Request for Comments 3253. March 2002.
- 6. Y. Goland, E. Whitehead, A. Faizi, S. Carter, D. Jensen, "<u>HTTP Extensions for Distributed Authoring WEBDAV</u>." Microsoft, U.C. Irvine, Netscape, Novell, Internet Proposed Standard Request for Comments 2518. February, 1999.
- 7. E. Whitehead, M. Murata "XML Media Types." U.C. Irvine, Fuji Xerox Info. Systems, Internet Informational Request for Comments 2376. July, 1998.
- Judith Slein, Fabio Vitali, E. James Whitehead, Jr., David Durand "<u>Requirements for a Distributed Authoring and Versioning</u> <u>Protocol for the World Wide Web</u>." Xerox Corporation, University of Bologna, U.C. Irvine, Boston University. Internet Informational Request for Comments 2291. February, 1998.

### NON PEER REVIEWED PUBLICATIONS

- 1. Jim Whitehead, "<u>Collaboration in Software Engineering: A Roadmap</u>," in *Future of Software Engineering 2007*, L. Briand and A. Wolf (eds.), IEEE-CS Press, 2007. (*Invited paper. Presentation slides:* [PPT] [PDF])
- Michael Mateas, Jim Whitehead, "<u>Design Issues for Undergraduate Game-Oriented Degrees</u>, Proceedings of the 2nd Annual Microsoft Academic Days Conference on Game Development, February 22-25, 2007. (Peer selected, but no review comments.)
- 3. Lisa Dusseault, Jim Whitehead, "<u>Open Calendar Sharing and Scheduling with CalDAV</u>", *IEEE Internet Computing*, vol. 9, no. 2, Mar/Apr 2005, pp. 81-89.
- 4. Jim Whitehead, "WebDAV: Versatile Collaboration Multiprotocol", IEEE Internet Computing, vol. 9, no. 1, Jan/Feb 2005, pp. 66-74.
- 5. Jim Whitehead, Sunghun Kim, editors, "ACM SIGWEB Anthology of Hypertext and Hypermedia", 2003. A CD-ROM collection of papers from the 1987-2003 ACM Hypertext conference series, and special issues of Communications of the ACM on Hypertext and Hypermedia. This CD-ROM has been issued as in place of the entire year 2001 volume of the SIGWEB Newsletter.
- 6. Sunghun Kim, Jim Whitehead, "<u>Automatic Generation of the SIGWEB Anthology CD</u>." In *SIGWEB Anthology of Hypertext and Hypermedia*, 2003.
- 7. Jim Whitehead, "<u>As We Do Write: Hyper-terms for Hypertext</u>." *SIGWEB Newsletter*, Vol. 9, No. 2-3, June-Oct. 2000 (appeared June 2003), pages 8-18.
- 8. Jim Whitehead, "<u>The Future of Distributed Software Development on the Internet</u>." *Web Techniques*, Vol. 4, No. 10, October, 1999, pages 57-63.
- 9. E. James Whitehead, Jr. "<u>Collaborative Software Engineering on the Web: Introducing WebDAV</u>." *Software Tech News*, Vol. 3, No. 1, 1999, pages 5-9.
- 10. E. James Whitehead, Jr. "Collaborative Authoring on the Web: Introducing WebDAV." Bulletin of the American Society for Information Science, Vol. 25, No. 1, October/November, 1998, pages 25-29.
- 11. E. James Whitehead, Jr., Meredith Wiggins, "WebDAV: IETF Standard for Collaborative Authoring on the Web." IEEE Internet Computing, Vol. 2, No. 5, September/October, 1998, pages 34-40.
- 12. E. James Whitehead, Jr. "Lessons from WebDAV for the Next Generation Web Infrastructure." In *Towards a New Generation of HTTP, A workshop on global hypermedia infrastructure*, held with 7th Int'l World Wide Web Conference, Brisbane,

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With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

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Build custom dashboards for your attorneys and clients with live data direct from the court.

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