

Miguel Velez

Publications

Books

- [9] Amy Brown and Greg Wilson. *The Architecture of Open Source Applications, Volume II. The Architecture of Open Source Applications v. 2.* Kristian Hermansen, 2012.
- [8] Amy Brown and Greg Wilson. *The Architecture of Open Source Applications, Volume I. The Architecture of Open Source Applications v. 1.* CreativeCommons, 2011.
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- [5] Paul Clements, Bachmann Felix, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, and Judith Stafford. *Documenting Software Architectures: Views and Beyond.* Pearson Education, 2002.
- [4] Mary Shaw and David Garlan. *Software Architecture: Perspectives on an Emerging Discipline.* Upper Saddle River, NJ, USA: Prentice-Hall, Inc., 1996.
- [3] Herbert A. Simon. *The Sciences of the Artificial (3rd Ed.)* Cambridge, MA, USA: MIT Press, 1996.
- [2] Erich Gamma, Richard Helm, Ralph Johnson, and John Vlissides. *Design Patterns: Elements of Reusable Object-oriented Software.* Boston, MA, USA: Addison-Wesley Longman Publishing Co., Inc., 1995.
- [1] Daniel P. Siewiorek, C. Gordon Bell, and Allen Newell. *Computer structures: principles and examples.* McGraw-Hill computer science series. McGraw-Hill, 1987. Chap. 2, Levels and Abstraction.

Refereed Journal Articles

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- [14] Gordon Bell and Daniel P. Siewiorek. "The Book Computer Structures: Thoughts After 40 Years". In *IEEE Ann. Hist. Comput.* 33.2 (Apr. 2011), pp. 89–95.
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- [12] Bradley Schmerl, Jonathan Aldrich, David Garlan, Rick Kazman, and Hong Yan. "Discovering Architectures from Running Systems". In *IEEE Trans. Softw. Eng. (TSE)* 32.7 (July 2006), pp. 454–466.
- [11] Joseph F. Maranzano, Sandra A. Rozsypal, Gus H. Zimmerman, Guy W. Warnken, Patricia E. Wirth, and David M. Weiss. "Architecture Reviews: Practice and Experience". In *IEEE Softw.* 22.2 (Mar. 2005), pp. 34–43.
- [10] David Garlan, Shang-Wen Cheng, An-Cheng Huang, Bradley Schmerl, and Peter Steenkiste. "Rainbow: Architecture-Based Self-Adaptation with Reusable Infrastructure". In *Computer* 37.10 (Oct. 2004), pp. 46–54.
- [9] Gail C. Murphy and David Notkin. "Reengineering with Reflexion Models: A Case Study". In *Computer* 30.8 (Aug. 1997), pp. 29–36.
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Refereed Conference Publications

- [18] Miguel Velez, Jason Sawin, Alexia Ingerson, and David Chiu. "Improving Bitmap Execution Performance Using Column-Based Metadata". In *The IEEE 4th International Conference on Future Internet of Things and Cloud (FiCloud)*. Vienna, Austria, Aug. 2016.
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- [16] Michael Eichberg, Ben Hermann, Mira Mezini, and Leonid Glanz. "Hidden Truths in Dead Software Paths". In *Proc. Europ. Software Engineering Conf. Foundations of Software Engineering (ESEC/FSE)*. Bergamo, Italy: ACM, Aug. 2015, pp. 474–484.
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Technical Reports

- [2] Rick Kazman, Mark Klein, and Paul Clements. *ATAM: Method for Architecture Evaluation*. Technical Report CMU/SEI-2000-TR-004. Pittsburgh, PA: Software Engineering Institute, Carnegie Mellon University, 2000.
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Part of Books

- [1] Mary Shaw. "The Role of Design Spaces". In Marian Petre and André van der Hoek. *Software Designers in Action: A Human-Centric Look at Design Work*. CRC Press, 2013.

Miscellaneous

- [5] Miguel Velez and Jason Sawin. *Improving the Efficiency of CHA through Parallelization*. Poster. Inquiry at St. Thomas. May 2016.
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- [3] Miguel Velez and Armando Solar-Lezama. *Simpler Implementation of Sketches through Enhanced Expressiveness*. Poster. MIT Summer Research Poster Session. Aug. 2015.
- [2] Miguel Velez. *Current and Future Relationships Between Robots and Humans*. Summa Cum Laude Paper. Apr. 2015.
- [1] Miguel Velez, Peter Gittins, and Jason Sawin. *Extending SMILES to Encode Reaction Mechanisms*. Poster. Inquiry at St. Thomas. May 2014.