

**Curriculum Vitae**  
**G. Michael Barnes, Ph.D.**  
1/20/2018

**Education**

Ph.D. Experimental Psychology, University of Kansas, 1980.  
MS. Computer Science, Kansas State University, 1980.  
MA. Psychology, California State University, Long Beach, 1975.  
AB. Psychology, University of California Berkeley, 1972.

**Academic experience:**

Full Professor, C.S.U. Northridge, Computer Science, 1989 to 2019  
Associate Professor, C.S.U. Northridge, Computer Science, 1984-1989  
Assistant Professor, C.S.U. Northridge, Computer Science, 1981-1984  
Assistant Professor, Kansas State University, Computer Science, 1980-1981

**Non-academic experience:**

Consulting various companies: software development and instruction, part time.

**Publications**

Hsu, W., Barnes, G. M., Are computer information technology majors different than Computer Science majors in personality, learning style, or academic performance? *The Journal of Computing Sciences in Colleges*, April 2016, 31, 4, pp 100-107.

Barnes, G. M., Using an instructor authored visual simulation framework in a CS3 course, *The Journal of Computing Sciences in Colleges*, April 2013, 28, 4, pp 148-154.

Barnes, G.M., SceneWorld: A Game-Oriented Graphics Course Starter Kit, *The Journal of Computing Sciences in Colleges*, April 2009, 24, 4, pp 268-274.

Covington, R., Barnes, G.M., A Time Management Assessment Technique That Improves Student Performance, *Proceedings ASEE Annual Conference*, Chicago, June 2006, 2006-121, pp 15.

Barnes, G.M., Noga, J., Smith, P.D., Wiegley, J., Experiments with Balanced-Sample Binary Trees. *Proceedings of the 36th SIGCSE technical symposium on Computer science education, ACM SIGCSE Bulletin*, 2005, pp. 166-170.

Timmerman, B., Lingard, R., Barnes, G.M., Active Learning with Upper Division Computer Science Students. *31st ASEE/IEEE Frontiers in Education Conference*, Oct. 10-13, 2001, Reno, N.V., pp. T3B-19 to T3B23.

Kellener, E., Barnes, G.M., R. Lingard, Effects of Scroll Bar Orientation and Item Justification when using List Boxes. *Proceedings of the Human Factors and Ergonomics Society 45th Annual Meeting*, 2001, pp 662-666.

Barnes, G.M. and Swim, B.R., Inheriting Software Metrics. *Journal of Object Oriented Programming*, vol. 6, 7, 1993, pp 27-34.

Barnes, G.M., Digitized speech's serial position effect. *Addendum, CHI '92 Conference Proceedings*, 1992.

Bruno, K.J., Welz, L.L., Barnes, G.M., and Sherif, J., Analyzing Human Errors in Flight Mission Operations, *Proceedings of the Sixth Annual Workshop on Space Operations, Applications and Research (SOAR '92), NASA Conference Publication 3187*, 11, 1992, pp 499 - 505.

Barnes, G.M., Visible Algorithms (catalog code ALG003), MS DOS based educational software, described in, and distributed by, S.M. Alexander and D.A. McAlpin (Eds), *Software for teaching Computer Science and Information System, CTI Centre for Computing Software Catalogue*, Edition 1, Newtownabbey, Northern Ireland, August 1990, pp 16.

Barnes, G.M., Microcomputer Simulations in the College Classroom. *Proceedings of the ACSUP Conference on Excellence in Education*, 1987, pp A57-A65.

Barnes, G.M., and Kind, G.A., Visual Simulations of Data Structures During Lecture. *Proceedings of the Eighteenth ACM SIGCSE Technical Symposium on Computer Science Education, ACM SIGCSE Bulletin*, 1987, pp 267-276.

Smith, P.D. and Barnes, G.M., *Files and Databases: An introduction*. Addison Wesley, pp 390, 1987.

Barnes, G.M., Hsu, N., Hsu, F., Sun, T., Nguyen, T., Smith, P.D., and Haus, G., A Computer Science Courseware Factory. *Proceedings of the Seventeenth ACM SIGCSE Technical Symposium on Computer Science Education, ACM SIGCSE Bulletin*, 1986, 18, pp 318-328.

Smith, P.D., Barnes, G.M., Turn, R., and Motil, J., Computing in the University of the Future. *Proceedings of the Western Educational Computing Consortium*, 1985, pp 206-209.

Barnes, G.M., Hsu, V. and Liu, V., Visible algorithms: A CAI companion for data structures. *IEEE EDCOMPCON*, 1984.

Barnes, G.M., and Stevens, E., Visible algorithms: Looking at stacks and queues. *Proceedings of the Western Educational Computing Consortium*, 1984, pp 248-251.

Barnes, G.M., Thompson, M., and Thunberg, K., Big Brother: A system for unobtrusively collecting programming behavior. *Proceedings of the Western Educational Computing Consortium*, 1984, pp 132-134.

Smith, P.D. and Barnes, G.M., Software Experiments and programming assignments. *Proceedings of the Western Educational Computing Consortium*, 1984, pp 47-49.

Barnes, G.M. and Smith, P.D., Experiments in file accessing techniques. *ACM SIGCSE Bulletin*, 1983, 15, pp 3-7.

Barnes, G.M. Evaluating the effectiveness of CAI: Buyer beware? *NCTE*, 1982.

Barnes, G.M. and Whitely, S.E., Problem restructuring processes for ill-structured verbal analogies. *Memory and Cognition*, 1981, 9, pp 411-421.

Barnes, G.M., Problem restructuring processes for ill-structured verbal analogies. *Psychonomic Society Conference*, 1980.

Whitely, S.E. and Barnes, G.M., The implications of processing event sequences for theories of analogical reasoning. *Memory and Cognition*, 1979, 7, pp 323-331.

Whitely, S.E. and Barnes, G.M., The implications of problem solving strategies for information theories of intelligence. *American Educational Research Association*, 1978.

Barnes, G.M., Creativity: A complementary relationship between information demand and success at problem solving. *Intelligence*, 1978, 2, pp 169-180.

Barnes, G.M. and Herman, P.C., Tokens for teachers: A vehicle for students to evaluate teachers with immediate consequences. *Western Psychological Association*, 1975.

### **Degree Manuscripts**

Barnes, G.M., Two Designs for an Artificial Analogy Solving System. MS report, Computer Science Department, Kansas State University, 1980.

Barnes, G.M., A Concurrent Model for Solving Well- and Ill-Structured Analogies. PhD dissertation, Psychology Department, Kansas University, 1980.

Barnes, G.M. The Relationship among Creativity, Intelligence, and Intuition. MS thesis, Psychology Department, California State University Long Beach, 1975.