Robert R. Snapp
Associate Professor
Computer Science, and Mathematics and Statistics

Education

A.B. Physics, UCSD, 1978
Ph.D. Physics, University of Texas, Austin, 1987

Recent Courses

Artificial Intelligence, Computer Graphics, Computers of the Future, Computer Networks, Information & Complexity, Neural Computation, Statistical Pattern Recognition, Puzzles, Games & Algorithms, Stochastic Processes.

Current research interests include statistical pattern recognition, nonparametric statistics, image analysis, neural networks, machine learning, and scientific computing. His current research activities are (*i*) learning efficient metrics for *k* nearest neighbor classifiers, (*ii*) extracting informative features for three-dimensional reconstructions from optical and electron microscope data, (*iii*) application of Markov random fields to problems in image analysis and ecoinformatics, (*iv)* pedagogies for introductory computer science.

Before joining the University of Vermont, as an Assistant Professor in Electrical Engineering in 1990, he was a Senior Research Fellow at the California Institute of Technology. He has also held visiting positions at IBM, Rome Laboratory, the Technion, and Lawrence Livermore National Laboratory.

For fun, he plays the piano.

Selected Publications

- "Nuclear remodeling of fibroblasts in stretched and unstretched connective tissue," with Kirsten N. Storch, Nicole A. Bouffard, Douglas J. Taatjes, and Helene M. Langevin, (in preparation).
- "Teaching graph algorithms in a corn maze," *Proceedings of the 11th annual SIGSCE conference on Innovation and and Technology in Computer Science Education* (ITiCSE06), 2006, p. 347.
- "Accelerated Kernel Feature Analysis," with Xianhua Jiang, Robert R. Snapp, Yuichi Motai, and Xingquan Zhu, *Proceedings of the 2006 IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, vol. 1, 2006, pp. 109–116.
- "Self-Tuning Cost Modeling of User-Defined Functions in an Object-Relational DBMS," with Zhen He, and Byung S. Lee, *ACM Transactions on Database Systems*, vol. 30, issue 3, 2005, pp. 812–853.
- "Asymptotic series representations of the finite-sample risk of *k* nearest neighbor classifiers," with Santosh S. Venkatesh, *Annals of Statistics*, **26**, (1998), pp. 850–878.