Nicholas Read Howe

118 Schuyler Place #2
Ithaca, NY 14850
(607) 256-0724
nihowe@cs.cornell.edu
http://www.cs.cornell.edu/home/nihowe

5139 Upson Hall
Cornell University
Ithaca, NY 14853
(607) 255-5578

EDUCATION

Cornell University, Ithaca, NY. Ph.D. candidate in Computer Science. *1995-present*
Minor in Cognitive Studies.

Princeton University, Princeton, NJ. A.B. *cum laude* in Physics. *June 1993*
Certificate in Engineering Physics.
Senior thesis topic: Computerized statistical analysis of structure in the universe.

PAPERS

Data as Ensembles of Records: Representation and Comparison, Howe, N. Proceedings of the Seventeenth International Conference on Machine Learning, 2000.

Integrating Color, Texture, and Geometry for Image Retrieval, Howe, N., and Huttenlocher, D., Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition, 2000.

Using Artificial Queries to Evaluate Image Retrieval, Howe, N., IEEE Workshop on Content-Based Access of Image and Video Databases, 2000.

Bayesian Reconstruction of 3D Human Motion from Single-Camera Video, Howe, N., Leventon, M., and Freeman, W., Advances in Neural Information Processing Systems 12, 2000.

Percentile Blobs for Image Similarity, Howe, N., Proceedings of the IEEE Workshop on Content-Based Access of Image & Video Libraries, 78-83, 1998.

Weighting Unusual Feature Types, N. Howe and C. Cardie, Tech Report, Cornell University Department of Computer Science, 1998.

Examining Locally Varying Weights for Nearest Neighbor Algorithms, Howe, N. and Cardie, C., Case-Based Reasoning Research and Development: Second International Conference on Case-Based Reasoning, D. Leake and E. Plaza, eds., Springer, 455-466, 1997.

Improving Minority Class Prediction Using Case-Specific Feature Weights, Cardie, C. and Howe, N., Proceedings of the Fourteenth International Conference on Machine Learning, D. Fisher, editor, Morgan Kaufmann, 57--65, 1997.

COURSES TAUGHT

The Computer Age, Head Instructor. *Summer 1996*
Introduction to Computer Science, Section Instructor. *Fall 1998*
High School Courses: Algebra I, Algebra II, Geometry, Trigonometry,
Physics, French I, French II, Principles of Technology. *1993-1995*

PRESENTATIONS

A Principled Approach to Image Retrieval, presentation of thesis proposal, Cornell University, December 14, 1998.

Where's Waldo? Cognitively Significant Image Segmentation, presented at the Cognitive Studies Annual Graduate Student Research Forum, Cornell University, October 3, 1998.

Determining Image Similarity by Computer, poster presentation, First Annual Northeast Cognitive Science Society (NECSS) Graduate Conference, May 1-2, 1998.

Perceptual Similarity in Image Databases, presented at the Cognitive Studies Annual Graduate Student Research Forum, Cornell University, November 1, 1997.

Class-Based Weights for k-Nearest Neighbors Algorithms, presented at the Cognitive Studies Annual Graduate Student Research Forum, Cornell University, October 19, 1996.

HONORS AND AWARDS

Cognitive Studies Trainee Fellowship in computer science. *1995-present*

NSF Graduate Research Fellowship, Honorable Mention *1996*

Sigma Xi, scientific research honorary society. *1993-present*

National Merit Scholar *1989*

JOB EXPERIENCE

Research Assistant, Cornell University *1999-Present*
Computer Vision Group, Department of Computer Science.

Teaching Assistant & Lecturer, Cornell University *Fall 1998*
Introduction to Computer Programming.

Research Intern, Mitsubishi Electric Research Lab *Summer 1998*
Computer vision group, with Bill Freeman.

Research Assistant, Cornell University *Summer 1997*
NLP and ML lab, Department of Computer Science.

Course Lecturer, Cornell University Summer Program *Summer 1996*
The Computer Age.

High School Teacher, Kingsland School, Kingsland, AR *1993-1995*
Algebra, geometry, trigonometry, physics, and French.

Computer Programmer, CRIHAN, Mont-Saint-Aignan, France. *Summer 1992*
Distributed calendar software.

Computer Programmer, Yale University. *Summers 1991,1989*
Scientific computing and visualization, Department of Mechanical Engineering.

PROFESSIONAL RESPONSIBILITIES

Cognitive Studies Program Liaison to Computer Science
Cornell University *1998-Present*

COMPUTER EXPERIENCE

Languages: C, LISP (w/ CLOS), C++, Java, Scheme, Matlab, Pascal, Fortran, Basic
Platforms: Unix, X Windows, Macintosh, Windows NT