

Jennifer A. Sager

Goal

To obtain an internship in the computer science or financial industry beginning in the middle of May 2006.

Experience

Research Assistant

September 2003 – present

Department of Computer Science, University of New Mexico, Albuquerque, NM

Supervisor: Prof. Darko Stefanovic

Researching the artificial design of DNA strands for intelligent computation using the DNA based logic gates developed by Prof. Darko Stefanovic and Prof. Milan Stojanovic. <http://www.cs.unm.edu/~darko/biomolcomp.html>

Engineering Intern

May 16, 2005 – August 19, 2005

Google, Mountain View, CA

Supervisor: Glenn Trewitt

Programmed a compiler for an embedded language using ANTLR (a tool to which provides a framework to construct a parser and lexer) and C++.

C++ programmer

October 2002 – June 2003

Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania, Philadelphia, PA

Supervisor: Prof. John H. Holmes

Programmed a data mining program with an extensive graphical user interface for the EpiXCS modifications of the learning classifier algorithm, XCS, by Stewart W. Wilson and Martin V. Butz.

LISP and Open GL programmer

June 2002 – August 2002

Radiation/Oncology Center, University of Washington, Seattle, WA

Supervisor: Prof. Ira Kalet

Programmed an extension to PRISM (a program that enables the user to plan and visualize radiation beams through a patient) using CLX/X-windows, and LISP that converts parallel contours into a triangular mesh to show 3D views of patient organs, tumors, and target areas. <http://www.radonc.washington.edu/medinfo/prism/>

Teacher

July 2000 – August 2000

Summerbridge, Hong Kong, China

Supervisor:

Taught a basic level economics course to ESL middle school students in Hong Kong. <http://www.summerbridge.org.hk/>

Education

University of New Mexico, Albuquerque, NM

(August 2003 – present)

PhD student in Computer Science

Course Work: Advanced Data Structures, Mathematical Foundations of Computer Science, Theory of Computation, Programming Paradigms, Randomized Algorithms, Programming Languages and Systems

General GRE: (December 27, 2002) Quantitative 790, Verbal 620

Complex Systems Summer School, Santa Fe Institute, Santa Fe, NM

(June 7, 2004 – July 2, 2004)

Course Work: Complex behavior in mathematical, physical, biological, and social systems

The Wharton School, University of Pennsylvania, Philadelphia, PA

(September 1998 – December 2002)

B. S. in Economics with a concentration in Statistics and a Minor in Computer Science

Course Work: Statistics, Probability, Microeconomics, Macroeconomics, Finance, Marketing, Legal Studies

Wharton Undergraduate Finance Club: Technology Lead (September 2000 to May 2002)

Education (continued)

Selected Publications

Jennifer A. Sager and Darko Stefanovic. Designing nucleotide sequences for computation: A survey of constraints. In A. Carbone, M. Daley, L. Kari, I. McQuillan, and N. Pierce, editors, *Preliminary Proceedings of the 11th International Workshop on DNA-Based Computers, DNA 2005 (University of Western Ontario: London, Ontario, Canada)*, June 2005.

John H. Holmes and Jennifer A. Sager. Rule discovery in epidemiologic surveillance data using EpiXCS: An evolutionary computation approach. In Silvia Miksch, Jim Hunter, and Elpida Keravnou, editors, *Proceedings of Artificial Intelligence in Medicine: 10th Conference on Artificial Intelligence in Medicine, (AIME 2005)*, volume 3581 of *Lecture Notes in Computer Science*. Springer, July 2005. http://dx.doi.org/10.1007/11527770_60.

John H. Holmes, Jennifer A. Sager, and Warren B. Bilker. A comparison of three methods for covering missing data in XCS. In *Seventh International Workshop on Learning Classifier Systems (IW LCS-2004) during the Genetic and Evolutionary Computation Conference (GECCO 2004)*, June 2004. <http://www.psychologie.uni-wuerzburg.de/IWLCS/>.

Skills

Computer Skills: C++, C, Java, ML, L^AT_EX, B_IB_TE_X, ANTLR, Microsoft Excel, Microsoft PowerPoint.

Available Software

RESUMET_EX: Coded a system using B_IB_TE_X bibliography files and L^AT_EX style files to facilitate the creation of a resume in postscript or pdf. Available at <http://cs.unm.edu/~sagerj/software.htm>

EpiXCS: Coded a data mining program with an extensive graphical user interface for the EpiXCS modifications of the learning classifier algorithm, XCS, by Stewart W. Wilson and Martin V. Butz. Available at <http://cs.unm.edu/~sagerj/software.htm>

References

Available on request.