

**CAROLINE ST.CLAIR**  
Associate Professor Computer Science  
North Central College – Naperville IL 60540  
(630) 637-5171  
cstclair@noctrl.edu

## **Education:**

DePaul University - Chicago, IL	
Ph.D./Computer Science	June 2000
Masters of Science/Computer Science	May 1991
Loyola University - Chicago, IL	
Bachelors of Science/Computer Science	May 1984

## **Academic Appointments:**

North Central College – Naperville, IL	2000 – present
Associate Professor – Computer Science Department	
Loyola University - Chicago, IL	1998 - 2000
Visiting Professor - Math/Computer Science Department	
Northwestern University - Evanston IL	1992 - present
Curriculum Coordinator for Computer Studies Program	1998 - 2000
Lecturer - University College, Computer Studies Program	1992 - 1998
DePaul University - Chicago, IL	1995 - 1998
Instructor - School of Computer Science, Telecommunications and Information Systems	

## **Industry Experience:**

Heads and Threads – Northbrook, IL	1991-1993
Assistant Manager of M.I.S.	1987-1989
Wilson Sporting Goods – River Grove, IL	1989-1991
Senior Programmer/Analyst – M.I.S. Department	1984-1986

## **Publications:**

The following textbook is in print:

St.Clair, Caroline and Jonathan Visick, *Exploring Bioinformatics: A Project-Based Approach*, Jones and Bartlett Publishers, 2010.

The following papers are in print:

Gray S, St.Clair C, James R, Mead J. 2007. Graduate Exposure to Programming Concepts Using Fading Worked Examples. *Proceedings of the 3<sup>rd</sup> Educational Computing Education Research Workshop – ICER 2007*.

Mead J, Gray S, Hamer J, James R, Sorva J, St.Clair C, Thomas L. 2006. A Cognitive Approach to Identifying Measurable Milestones for Programming Skill Acquisition. *SIGCSE Bulletin*, 38(4):182-194.

St.Clair, Caroline. 2003. Finding the Most Useful Clusters: Clustering and the Usefulness Metric. *Between Data Science and Applied Data Analysis*. Springer-Verlag Publishers.

St.Clair, Caroline. 2000. A Usefulness Metric and Its Application to Decision Tree Based Classification. Ph.D. diss., DePaul University of Chicago.

St.Clair, Caroline, Chengwen Liu, and Niki Pissinou. 1998. Attribute Weighting: A Method of Applying Domain Knowledge to Classification Based Decision Trees. *Proceedings of Conference of Information and Knowledge Management*. ACM Press.

St.Clair, Caroline. 1997. Classification in Data Mining: A Look at Traditional Methods in a Non-Traditional Environment. *Proceedings of the 13th International Conference on Advanced Science and Technology*.

St.Clair, Caroline. 1997. Telecommuting: A Woman's Friend or Foe. *Proceedings of the IFIP/WWC Conference*.

## **Presentations:**

Panel Presentation “Student Outcomes Assessment: What is it? How do you make it work for you?” for CCSC-MW: Consortium of Computer Science Colleges – Midwest Division, Hope College MI, 2008.

Panel Presentation “Student Outcomes Assessment: What is it? How do you make it work for you?” for SIGCSE 2008: The 39<sup>th</sup> Technical Symposium on Computer Science Education, Portland, Oregon, 2008.

Panel Presentation “Assessing Computer Science Programs: What Have We Learned” for SIGCSE 2007: The 38<sup>th</sup> Technical Symposium on Computer Science Education, Covington, Kentucky, 2007.

Working group presentation “A Cognitive Approach to Identifying Measurable Milestones for Programming Skill Acquisition” for the ITiCSE 2006: Innovation and Technology in Computer Science Education, Bologna, Italy, 2006.

Presented “Data Mining Algorithms in Bioinformatics” for the ACCA Biology Seminar hosted by Benedictine University, 2004.

Presented “Finding the Most Useful Clusters: Clustering and the Usefulness Metric” at GfKI2002 (Gesellschaft für Klassifikation) in Mannheim, Germany – July 2002.

Presented “Attribute Weighting: A Method of Applying Domain Knowledge to Classification Based Decision Trees” at CIKM 1998.

Data Mining presentation for SWE group at Loyola University - 1998.

Presented a TechStep seminar for DePaul University - 1998.

Presented “Classification in Data Mining: A Look at Traditional Methods in a Non-Traditional Environment” at ICAST 1997.

## **Student Research Publications and Presentations:**

The following work was funded by the North Central College Summer Undergraduate Research Program and was presented at the RALL Symposium, 2005 at North Central College:

Christiansen, Laura. (advisor Caroline St.Clair) 2004. Development and Testing of an Actionability Tool.

The following work was funded by the North Central College Summer Undergraduate Research Program:

Christiansen, Laura. (advisor Caroline St.Clair) 2003. The Impact of Ambiguous Points on Clustering Algorithms.

The following work was completed as part of various independent study or directed study projects:

Fugitt, Jesse. (advisor Caroline St.Clair) 2003. Component Based Data Mining for the Student. *Proceedings of the National Conferences on Undergraduate Research*. UNC Asheville.

Fugitt, Jesse. (advisor Caroline St.Clair) 2003. Orally presented his work on “Component Based Data Mining for the Student” at NCUR 2003, Salt Lake City, Utah.

## **Administrative and Service Appointments:**

### North Central College

Graduate Coordinator for Computer Science: 2009 – present.  
Computer Science Department Chair: 2009 – present.  
Chair of the Assessment Committee: 2004 – 2009.  
Committee Member for the General Education Sub-Committee: 2003 – 2009.  
Science Division Rep. on APPC (Academic Programs and Policies Committee): 2003 – 2005.  
Welfare and Benefits Committee Member: 2002-2003.  
Master's Committee Member for Computer Science: 2000–present.  
Graduate Studies Member: 2002-2003.  
Graduate Studies Committee Secretary: 2001-2002.  
Graduate Studies Science Division Representative: Fall 2001 (for Dr. Muganda on pro-term).  
FYI Orientation Faculty Advisor: 2001.  
ACCA Programming Contest Developer: 2001 and 2002.

### Northwestern University/University College

Member of the Faculty Advisory Board: 1998.  
Program Coordinator for Computer Studies: 1997-1998.

### DePaul University

Chapter Chair of Student Branch of IEEE (Branch Co-Founder) : 1996-1998.  
Computer Society Chapter Chair of Student Branch of IEEE: 1998.

### Other Organizations

Registration Chair for YUFORIC Section of ICAST '97- 13th International Conference on  
Advanced Science and Technology Conference: 1997.  
Paper Reviewer for CIKM '97 (Conference on Information and Knowledge Management): 1997.

## **Awards:**

Dissinger Junior Faculty Teaching Award at North Central College - 2005  
Who's Who Among America's Teachers - 2000  
Distinguished Teaching Award at Northwestern University/University College - 1998  
GAANN Fellowship - DePaul University - 1995-1998  
Student Scholarship Award from IEEE -1997  
Student Leadership Award from IEEE - 1996

## **Memberships:**

SIGEVO Member 2009 - present  
SIGCSE Member 2003 - present  
SIGKDD Member 2000 - present  
ACM Member 1995 – 2006  
CUR Member 2001 - 2006  
IEEE Member 1995 - 2002  
AAAI Member since 1997 – 2002