

Brent Castle

Indiana University
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EDUCATION

Indiana University, Bloomington, Indiana

Ph.D. Student, Department of Computer Science
Computer Science (expected 2012)

Rose-Hulman Institute of Technology, Terre Haute, Indiana

B.S., Department of Electrical and Computer Engineering
Computer Engineering (2004)

RESEARCH INTERESTS

Statistical Machine Learning, particularly classification methodology. I am currently working on Distance/Metric Learning algorithms and Disparate Information Fusion.

Manifold Learning, i.e., nonlinear dimension reduction algorithms.

Theoretical properties of machine learning algorithms.

HONORS AND AWARDS

Best Presentation, IU Computer Science and Informatics Graduate Research Poster Session, 2008
Governor Bob Orr Indiana Entrepreneurial Fellowship, 2004-2006
Rose-Hulman Institute of Technology Dean's List, 2000-2004

RESEARCH

Invited Talk

Interface 2008, Durham, NC. Combining Disparate Information by Nonmetric Multidimensional Scaling. *Joint work with Michael Trosset*

Poster

IU Computer Science and Informatics Graduate Research Poster Session, 2008. Combining Disparate Information by Nonmetric Multidimensional Scaling. *Joint work with Michael Trosset*

TEACHING

Research Mentor Mentored a team of two undergraduates in the Informatics Research Scholars Program (IU) for a semester long research project on Machine Learning. Spring 2009.

Single Lectures Correlation (S320/S520 IU, Spring 2009). Disparate Information Fusion and K-means Clustering Algorithms (S675 IU, Spring 2008).

Resident Tutor Rose-Hulman Institute of Technology, New Res Hall. Tutored sophomore level mathematics, computer science, and engineering classes. 2002 - 2003.

ACADEMIC EXPERIENCE

Department of Statistics, Indiana University

August 2007 – Present

Research Assistant (Professor Michael Trosset)

Statistical Machine Learning, Disparate Information Fusion, Manifold Learning

PROFESSIONAL EXPERIENCE

Roche Diagnostics, Indianapolis, Indiana

December 2006 – August 2007

Software Engineer

- Firmware development on an electrochemical glucose meter.

Theron Inc., Indianapolis, Indiana

June 2004 – November 2006

Software Engineer, Governor Bob Orr Indiana Entrepreneurial Fellow

- Non-invasive optical blood pressure meter. (Optical Vitals)
- High speed measurement and analysis of a breast biopsy needle. (Suros Surgical Systems)
- Robotic pipetting system used for PCR. (Roche Diagnostics)

SKILLS

C, C++, Java, Matlab, Perl, Python, R

Updated May 9, 2009.