

## **Dennis P. Groth**

School of Informatics and Computing  
919 East 10<sup>th</sup> Street  
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### **Education**

Ph.D., 2002, Computer Science, Indiana University Bloomington  
B.S., 1983, Computer Science, Loyola University of Chicago

### **Employment**

#### Indiana University

Associate Vice Provost for Undergraduate Education, 2009 - present  
Associate Dean for Undergraduate Studies, School of Informatics, 2008 - present  
Associate Professor, School of Informatics, 2008 - present  
Director, Undergraduate Studies, Department of Informatics, 2006 - 2008  
Assistant Professor, School of Informatics, 2002 - 2008  
Lecturer, School of Informatics, 2001 - 2002  
Associate Instructor, Department of Computer Science, 1997 - 2001

#### Industrial Experience

Independent Software Development Consultant, 1995 - 1996  
Director, Crawford Consulting, Inc., 1994 - 1995  
Manager, Systems Development, Moore Business Forms, 1990 - 1994  
Project Manager, Spectrum Healthcare Solutions, a Partnership of Baxter Healthcare and IBM Corporations, 1989 - 1990  
Project Manager, Baxter Healthcare Corporation, 1987 - 1989  
Senior Programmer Analyst, Baxter Healthcare Corporation, 1985 - 1987  
Programmer Analyst, American Hospital Supply Corporation, 1984 - 1985  
Consultant, Andrea Data Systems, 1983 - 1984

### **Responsibilities and Accomplishments**

#### **Associate Dean for Undergraduate Studies, School of Informatics and Computing**

The School of Informatics and Computing at Indiana University is the first school of Informatics founded in the United States. Created in 2000, the school now provides a breadth of computing education and research programs that span the foundations of computing, to the applications of computing in a very large number of application domains, to the implications of the use of computing/information technology on organizations and society. The programs in Bloomington now number over 800 undergraduate Informatics and Computer Science majors, as well as over 300 declared pre-majors.

As the Associate Dean for Undergraduate Studies I have direct responsibility for the school's undergraduate and graduate career services, undergraduate curricula,

undergraduate recruiting and advising, enrollment management, academic records and recording of degrees, course and classroom scheduling, scholarship review and awards, and maintaining the academic standards of our degree programs.

- Increased enrollment of undergraduate Informatics and Computer Science majors by 167% to over 800 students.
- More than doubled the number of undergraduate women majors in Informatics and Computer Science from 75 to 165 in a two and a half year timeframe. Established a goal to double the number of undergraduate women majors again.
- Increased undergraduate credit hour generation by over 62%, which results in at least \$3.4 million of additional income for the school per year.
- Led strategic planning committee for undergraduate education. Established principal goals of addressing the quality of introductory course sequences.
- Managed the logistics, recruiting of students, judging, and communications for Building Entrepreneurs in Software and Technology (BEST), a 1.1 million dollar fund to support student startups. The program will run for at least four years and provide up to \$250,000 each year to fund student technology startups.
- Developed Corporate Partners Program to provide undergraduate scholarships, and forge stronger ties between the school and companies that recruit our students. Program has provided almost \$100,000 total in undergraduate scholarships. For the coming year the amount raised is expected to increase by approximately \$40,000.
- Focused recruiting efforts of undergraduate majors on exploratory students, which are about 40% of the incoming class of 7,500 new students each year. Continued to provide support for direct recruiting from high schools, but organized around significant programs to reach multiple prospective students rather than 1-2 at any given high school.
- Developed direct admission program to attract top achieving prospective high school seniors already admitted to Indiana University. Increased number of top achieving students admitted to our program without increasing overall budget. Enhanced program with support for overseas study experience – also within existing budget.
- Established teaching and performance expectations for professional lecturers, who had previously been allowed by their academic programs to perform their teaching duties without supervision or establishment of minimally acceptable standards of performance.
- Developed the Faculty Collegium on Student Success, which created an environment that provides professional development activities, a support program, and reflective teaching practice for the school's professional lecturers. The Collegium's focus on student success has positively influenced DWF rates in key gateway courses.

## **Associate Vice Provost for Undergraduate Education, Indiana University Bloomington**

The Office of the Vice Provost for Undergraduate (OVPUE) was created in 2009 by organizing many units central to undergraduate education on the Bloomington campus from the previous Dean of Faculties Office. OVPUE as a whole is responsible for a wide range of academic support programs, including: exploratory student advising, service learning, instructional consulting, records, dual-credit and other pre-college programs, test administration, degree-completion programs, health and law professions advising, non-credit lifelong learning, and general education.

As the Associate Vice Provost for Undergraduate Education I am responsible for programs and activities focusing on curricular procedures and outreach. In this capacity I am directly responsible for overseeing the Bachelors of General Studies degree, the Service Learning program, placement and high-stakes exam administration, lifelong learning through non-credit professional and liberal arts classes, community outreach through Leadership Bloomington Monroe County, and information technology support for the unit.

- Coordinated the development of the automated Course Approval and Remonstrance (CARMin) system. CARMin replaced an antiquated multi-part form that took months for the process of creating new courses, or changing existing courses. CARMin is a multi-campus, university-wide system that was developed with full input of academic programs and administrative functions. CARMin captures information essential for accreditation, including essential learning outcomes, for all courses.
- Coordinated the development of an online course description system. The system automatically pulls information from academic bulletins, but also allows faculty to develop rich descriptions for the sections of their courses.
- Developed a portal to support undergraduate research and creative activity on the Bloomington campus. The portal provides resources for students and faculty mentors, a database of project opportunities, and highlights of past student projects.
- Collaborated on the creation of the Provost's Award for Undergraduate Research, a yearly prize for students and their mentors recognizing scholarly research as well as creative activity.
- Enhanced programmatic support for Service Learning, including the development of stable funding for Advocates for Community Engagement.
- Developed plans and piloted a project to evaluate moving student evaluation of teaching forms to an online course evaluation system.
- Developed plan for support and development of online placement exams for foreign languages. Pilot will occur in Summer 2012 for approximately 4000 new students.
- Restructured lifelong learning program to refocus on key IU strengths.

## Research Interests

Visual Analytics  
Information Visualization  
Human Computer Interaction  
Data Mining  
Data Modeling

## Edited Journals/Collections

- Dennis P. Groth and Jeffrey K. MacKie-Mason: *Why an Informatics Degree?*, Communications of the Association for Computing Machinery (CACM), Volume 53, Number 2, 2010, pp. 26-28.
- Dennis P. Groth and Kristy Streefkerk: *Provenance and Annotation for Visual Exploration Systems*, IEEE Transactions on Visualization and Computer Graphics, Special Issue on Visual Analytics, Volume 12, Number 6, 2006, pp. 1500-1510.
- Dennis P. Groth: *An Evaluation of a Rule-Based Language for Classification Queries*, Springer-Verlag, Lecture Notes in Computer Science, No. 3392, 2005, pp. 79-97.
- Paul W. Purdom, Dirk Van Gucht and Dennis P. Groth: *Average Case Analysis of the Apriori Algorithm*, SIAM Journal of Computing, Volume 33, Number 5, 2004, pp. 1223-1260.
  
- Dennis P. Groth and Edward L. Robertson: *Discovering Frequent Itemsets in the Presence of Highly Frequent Items*, Web-Knowledge Management and Decision Support - Selected Papers from the 14<sup>th</sup> International Conference on the Applications of Prolog, Springer-Verlag, Lecture Notes in Artificial Intelligence, No. 2543, 2003, pp. 258-271.

## Refereed Conference and Workshop Papers

- Dennis P. Groth: *Tracking and Organizing Visual Exploration Activities across Systems and Tools*, 11<sup>th</sup> International Conference on Information Visualization, Zurich, Switzerland, July, 2007, pp. 11-16.
- Dennis P. Groth and Matthew P. Hottell: *How Students Perceive Risk: A Study of Senior Capstone Project Teams*, 20<sup>th</sup> IEEE Conference on Software Engineering Education and Training (CSEE&T), Dublin, Ireland, July, 2007, pp. 45-54.
- Amanda Stephano, Dennis P. Groth: *USEable Security: Interface Design Strategies for Improving Security*, 3<sup>rd</sup> International Workshop on Visualization for Computer Security, Fairfax, Virginia, November, 2006.
- Dennis P. Groth: *Visualizing Distributions and Classifier Accuracy*, 10<sup>th</sup> International Conference on Information Visualization, London, U.K., July, 2006, pp. 389-394.
- Dennis P. Groth and Matthew P. Hottell: *Designing and Developing an Informatics Capstone Project Course*, 19<sup>th</sup> IEEE Conference on Software Engineering Education and Training (CSEE&T), Oahu, HI, April, 2006, pp. 61-68.
- Benjamin W. Murphy and Dennis P. Groth, *Augmenting Internet Browser History with Contextual Visual Representations*, HCI International Conference, Las Vegas, NV, July, 2005.
- Anthony Faiola and Dennis P. Groth: *Enhancing 3D File Search with Landscapes and Personal Histories: Exploring the Possibilities of TerraSearch+*, 9<sup>th</sup> International Conference on Information Visualization (IV05), London, UK, July, 2005, pp. 613-618.

- Dennis P. Groth: *Tracking Personal Histories for Knowledge Discovery Tasks*, 1<sup>st</sup> International Workshop on Exploiting Context Histories in Smart Environments, Workshop at the 2005 Pervasive Computing Conference, Munich, Germany, March, 2005.
- Anthony Faiola, Timothy Altom and Dennis P. Groth, *Integrating the Visualization of Personal Histories of File Usage into 3D Landscapes: Enhancing Desktop File Searching Using TerraSearch+*, HCI International Conference, Las Vegas, NV, July, 2005.
- Dennis P. Groth: *Information Provenance and the Knowledge Rediscovery Problem*, 8<sup>th</sup> International Conference on Information Visualization (IV04), London, UK, July, 2004, pp. 345-351.
- Sean E. Ellis and Dennis P. Groth: *A Collaborative Annotation System for Data Visualization*, ACM Conference on Advanced Visual Interfaces (AVI), Gallipoli, Italy, May, 2004, pp. 411-414.
- Dennis P. Groth: *An Evaluation of a Rule-Based Language for Classification Queries*, 15<sup>th</sup> International Conference on Applications of Declarative Programming and Knowledge Management (INAdP), Berlin, Germany, March, 2004, pp. 193-202.
- Dennis P. Groth: *Visual Representation of Database Queries using Structural Similarity*, 7<sup>th</sup> International Conference on Information Visualization (IV03), London, UK, July, 2003, pp. 102-107.
- Dennis P. Groth: *Visualizing Query Structure*, Proceedings of the 18<sup>th</sup> ISCA International Conference on Computers and Their Applications (CATA), Honolulu, HI, USA, March 2003, pp.134-138.
- Dennis P. Groth and Edward L. Robertson: *An Integrated System for Database Visualization*, Proceedings of the 6<sup>th</sup> International Conference on Information Visualization (IV), London, UK, July 2002, pp. 462-467.
- Chris M. Giannella, Mehmet M. Dalkilic, Dennis P. Groth and Edward L. Robertson: *Improving Query Evaluation with Approximate Functional Dependency Based Decompositions*, Proceedings of the 19th British National Conference on Databases (BNCOD), Sheffield, UK, July 2002, pp. 26-41.
- Dennis P. Groth and Edward L. Robertson: *An Entropy-Based Approach to Visualizing Database Structure*, The Sixth IFIP Working Conference on Visual Database Systems (VDB), Brisbane, Australia, May 2002, pp. 157-170.
- Dennis P. Groth and Edward L. Robertson: *Discovering Frequent Itemsets in the Presence of Highly Frequent Items*, Rule Based Data Mining Workshop, in conjunction with the 14<sup>th</sup> International Conference on the Applications of Prolog (INAP), Tokyo, Japan, October 2001, pp. 237-245.
- Dennis P. Groth and Edward L. Robertson: *It's All About Process: Project-Oriented Teaching of Software Engineering*, 14th Conference on Software Engineering Education and Training (CSEE&T), Charlotte, NC, USA, February 2001, pp. 7-17.
- Dennis P. Groth and Edward L. Robertson: *Architectural Support for Database Visualization*, New Paradigms for Information Visualization and Manipulation (NPIV), Washington, DC, USA, November 1998, pp. 53-55.

## Edited Books

- Ebad Banissi, Liz J. Stuart, Theodor G. Wyeld, Mikael Jern, Gennady L. Andrienko, Nasrullah Memon, Reda Alhaji, Remo Aslak Burkhard, Georges G. Grinstein, Dennis P. Groth, Anna Ursyn, Jimmy Johansson, Camilla Forsell,

Urska Cvek, Marjan Trutschl, Francis T. Marchese, Carsten Maple, Andrew J. Cowell, Andrew Vande Moere: 13th International Conference on Information Visualisation, IV 2009, 15-17 July 2009, Barcelona, Spain IEEE Computer Society 2009

- Ebad Banissi, Liz Stuart, Mikael Jern, Gennady Andrienko, Francis T. Marchese, Nasrullah Memon, Reda Alhaji, Theodor G. Wyeld, Remo Aslak Burkhard, Georges Grinstein, Dennis P. Groth, Anna Ursyn, Carsten Maple, Anthony Faiola and Brock Craft, Editors: *Proceedings of the 12<sup>th</sup> International Conference on Information Visualization*, IEEE Computer Society, London, UK, July, 2008.
- Ebad Banissi, Remo A. Burkhard, Georges Grinstein, Urska Cvek, Marjan Trutschl, Liz Stuart, Theodor G. Wyeld, Gennady Andrienko, Jason Dykes, Mikael Jern, Dennis P. Groth and Anna Ursyn, Editors: *Proceedings of the 11<sup>th</sup> International Conference on Information Visualization*, IEEE Computer Society, Zurich, Switzerland, July, 2007.

### **Short Papers/Poster Presentations/Demonstrations**

- Kayce N. Reed and Dennis P. Groth: *Looking Good on the Web: Evaluating the Visual Impact of Political Websites*, Student Research Competition, ACM Sig-CHI Conference, Florence, Italy, April, 2008.
- Nathan C. Rahn, Youn-Kyun Lim and Dennis P. Groth: *Redesigning Video Analysis: An Interactive Ink Annotation Tool*, Work in Progress, ACM Sig-CHI Conference, Florence, Italy, April, 2008.
- Kayce N. Reed and Dennis P. Groth: *Perception of Congress on the Web: Data Analysis Inspired by the Red Versus Blue United States Map*, Workshop on Social Data Analysis, ACM Sig-CHI Conference, Florence, Italy, April, 2008.
- Dennis P. Groth, Helen H. Hu, Betty Lauer and Hwajung Lee: *Improving Computer Science Diversity through Summer Camps*, ACM Conference on Computer Science Education (SIGCSE), Portland, OR, USA, March, 2008.
- William R. Hazlewood and Dennis P. Groth: *A Pervasive Computing Workshop for Pre-Collegiate Students: Separating Design and Implementation*, 7<sup>th</sup> International Conference on Ubiquitous Computing, Orange County, CA, September, 2006.
- Dennis P. Groth and Matthew P. Hottell: *Work in Progress: Informatics Capstones*, Frontiers in Education Conference, Indianapolis, IN, October, 2005.
- Vasudha Chandrasekaran, Dennis P. Groth and Yvonne Rogers: *INFUSE: An Inquiry-Based Field Learning Framework*, 4<sup>th</sup> International Conference on Interface Design and Children, Boulder, CO, June, 2005.
- Dennis P. Groth and Benjamin W. Murphy: *Tracking User Interactions Within Visualizations*, IEEE Symposium on Information Visualization, Austin, TX, October, 2004.
- Leah Sandvoss and Dennis P. Groth: *Report generator and analysis tool for Reciprocal Net crystallographers*, 226<sup>th</sup> American Chemical Society National Meeting, New York, NY, September, 2003.

- Leah Sandvoss and Dennis P. Groth: *An Informatics Tool for Crystallography Administrators*, 15<sup>th</sup> International Conference on Scientific and Statistical Databases (SSDBM), Cambridge, MA, July, 2003, pp. 255-257.
- Dennis P. Groth and Edward L. Robertson: *An Integrated Approach for Database Visualization*, Advanced Visual Interfaces (AVI), Trento, Italy, May 2002, pp. 365-366.

### **Textbooks**

- Dennis P. Groth and Arijit Sengupta: *Introduction to Database Applications: A problem-solving approach*, McGraw-Hill Custom Publishing, 1998.

### **Technical Reports**

- Amanda Stephano and Dennis P. Groth: *USEable Security: Interface Design Strategies for Improving Security*, Indiana University School of Informatics Technical Report, August, 2006.
- Paul W. Purdom, Dirk Van Gucht and Dennis P. Groth: *Average Case Analysis of the Apriori Algorithm*, Indiana University Computer Science, Technical Report No. 529, February, 2003.
- Dennis P. Groth: *Architectural Support for Database Visualization*, Ph.D. Thesis, Indiana University Computer Science, Technical Report No. 561, May, 2002.
- Chris M. Giannella, Mehmet M. Dalkilic, Dennis P. Groth and Edward L. Robertson: *Using Horizontal-Vertical Decompositions to Improve Query Evaluation*, Indiana University Computer Science, Technical Report No. 558, January, 2002.
- Dennis P. Groth and Edward L. Robertson: *It's All About Process: Project-Oriented Teaching of Software Engineering*, Indiana University Computer Science, Technical Report No. 532, 1999.

### **Grants / Funding**

- BPC-LSA: The Indiana Stars Alliance - Reaching Out, Connecting, and Enhancing Diversity, National Science Foundation, July, 2009 – September, 2010, \$78,025 (PI)
- Knowledge Discovery through Provenance Collection, Representation, and Use in the Lilly Science Grid, April, 2008 – January, 2009, \$67,878 (Co-PI)
- Computing with Tablet PC's, Hewlett Packard, December, 2008, \$8,000 (PI)
- Informatics Podcasts, IU Teaching and Learning, April, 2008 – December, 2009, \$3,487 (PI).
- Human Factors Evaluation of IROS3, U.S. Navy, SAIC, December, 2005 –September, 2006, \$90,032 (PI).
- An Itanium2 Environment for Grid-Based Data Mining, Hewlett Packard Corporation, April, 2004 – August, 2005, \$123,080 (PI).
- Collaborative Research: Science of Search: Data Search, Analytics, and Architecture Center (DSAAC), National Science Foundation, July, 2006 – June, 2007, \$10,000 (Senior Personnel).
- Tablet PC, Hewlett Packard, \$3,198 (PI).
- Tablet PC, Microsoft Research, \$2,500 (PI).
- Development of an online Informatics outreach website, SBC Excelsator Program, January, 2005 – December, 2006, \$25,000 (PI).
- Integrating Project Management Tools and Techniques with Oncourse CL, IU SBC Fellows Program, March, 2006 – December, 2006, \$15,000 (PI).

- Enhancing the Capstone Experience for Informatics Undergraduate Students, IU Summer Instructional Development Fellowship Program, June, 2007 – August, 2007, \$8,000 (PI).
- Examining the Relationship between Perceived Project Risk and the use of Collaborative Learning Environments, IU SBC Fellows Program, October, 2005 – March, 2006, \$3,800 (PI).
- Transitioning Capstone Projects to OnCourseCL and ePortfolio, IU SBC Fellows Program, June, 2005 – September, 2005, \$2,500 (PI).
- Access versus Effective Use of Technology in a High Needs Elementary School, Smarter Kids Foundation, April, 2006 – June, 2006, \$2,100 (PI).
- IU Service Learning Fellowship, Community Outreach and Partnership for Service Learning, October, 2005, \$1,000 (PI).

### **Awards**

- Indiana University Summer Instructional Development Fellow, 2007
- First Finalist - State of Indiana Techpoint Mira Award for Contribution to Technology Education, 2006
- Indiana University SBC Fellow - Implementing Innovation, 2006
- Nomination for Indiana University Students Choice Award, 2004, 2005, 2006, 2007, 2008, 2009
- Indiana University Trustees Award for Teaching Excellence, 2005
- Indiana University SBC Fellow - Preparing for Innovation, 2005
- Indiana University SBC Fellow - Examining Innovation, 2005
- Indiana University Service Learning Fellow 2005
- Indiana University School of Informatics Teaching Excellence Award, 2003
- Indiana University Computer Science Teaching Excellence Award, 1999

### **Affiliations**

- ACM, IEEE, SIAM, IV Society

### **Service**

#### **School and Department Level Committees and Service**

Associate Dean for Undergraduate Studies (2008-present)  
 Informatics Facilities Committee (2002-2008)  
 Informatics Academic Council (2006-2008)  
 Chair – Informatics Undergrad Program Committee (2006-2008)  
 Informatics Undergrad Program Committee (2002-2006)  
 Co-Chair Undergraduate Education Strategic Planning Committee (2007)  
 Diversity Strategic Planning Committee (2007)  
 Informatics Merit Review Committee (2005)  
 Informatics Corporate Outreach Taskforce (2002-2003, 2003-2004, 2004-2005)  
 Faculty sponsor for the Informatics club (2003-2004, 2004-2005)  
 Graduate Student Orientation (2003-2009)  
 New Faculty Orientation (2003-2005)  
 Undergraduate Enrollment Task Force (2005)  
 Diversity Committee (2006-2007)  
 Informatics Diversity Recruitment (2004-2005)



Diversity Hiring Committee (2003-2004)  
Data and Information Hiring Committee (2003-2004)  
HCI Director Hiring Committee (2004-2005)  
Career Services Associate Director Hiring Committee (2006)  
Career Services Director Hiring Committee (2007)  
Informatics Organizational Structure Committee (2006)

**University Level Committees and Service**

Associate Vice Provost for Undergraduate Education (2009-present)  
ETextbook Initiative Steering Committee (2011)  
Provost's Taskforce on Undergraduate Education (2008-2009)  
Distance Education Taskforce (2010)  
Campus Curriculum Committee (2008-present)  
Bloomington Faculty Council (2005-2009)  
University Faculty Council (2006-2008)  
Chair - Bloomington Technology Policy Committee (2006-2008)  
Co-Chair - Indiana University Technology Policy Committee (2006-2008)  
University Information Technology Services Quality Council (2007-2008)  
Bloomington Technology Policy Committee (2005-2006)  
Research Institute Review Committee for AISRI (2002)

### **Professional Service**

PC Member: Intl Information Visualization Conf. (2004-2011)  
Symposium Chair: HCI and Information Visualization (2005-2011)  
Symposium Chair: Visual Data Mining (2005-2011)

### **Grant Reviewing Service**

NSF Proposal Review Panelist (2004, 2005, 2006, 2007)  
Indiana 21<sup>st</sup> Century Fund Proposal Reviewer (2006)  
France-Berkeley Fund (2007)

Reviewer: Communications of the ACM, Annual Review of Information Science and Technology (ARIST), International Information Visualization Conference, Computer Graphics, Imaging and Visualization Conference, Conference on Human Factors in Computing (CHI), User Interface System Technology (UIST), Journal of Digital Libraries, Journal of Data and Knowledge Engineering, Transactions on Information Systems (TOIS), and many others.

### **Courses Taught at Indiana University**

<b>Course</b>	<b>Term</b>	<b>Enrollment</b>	<b>Grad/Undergrad</b>
I421 – Applications of Data Mining	Fall 2011	38	Undergrad
I495 – Capstone 2	Spring 2011	165	Undergrad
I494 – Capstone 1	Fall 2010	166	Undergrad
Y100 – Exploring Info & CS	Fall 2010	130	Undergrad
I495 – Capstone 2	Spring 2010	133	Undergrad
I494 – Capstone 1	Fall 2009	135	Undergrad
I495 – Capstone 2	Spring 2009	67	Undergrad
I494 – Capstone 1	Fall 2008	70	Undergrad
B669/I590 – Data and Search	Spring 2008	33	Grad
I590 – Visual Analytics	Spring 2008	25	Grad
I495 – Capstone 2	Spring 2008	83	Undergrad
I450 – Capstone 1	Fall 2007	85	Undergrad
I451 – Capstone 2	Spring 2007	78	Undergrad
I450 – Capstone 1	Fall 2006	78	Undergrad
I451 – Capstone 2	Spring 2006	104	Undergrad
I450 – Capstone 1	Fall 2005	106	Undergrad
I451 – Capstone 2	Spring 2005	111	Undergrad
I450 – Capstone 1	Fall 2004	115	Undergrad
I451 – Capstone 2	Spring 2004	132	Undergrad
I450 – Capstone 1	Fall 2003	138	Undergrad
I451 – Capstone 2	Spring 2003	61	Undergrad
I450 – Capstone 1	Fall 2002	65	Undergrad
I590 – Informatics Tech	Fall 2002	19	Grad
I451 – Capstone 2	Spring 2002	15	Undergrad
I450 – Capstone 1	Fall 2001	16	Undergrad
I111 – Intro to Databases	Spring 2001	68	Undergrad
P466/566 – SW Eng 2	Spring 1998	21	Grad/Undergrad
B666 – SW Eng Mgmt 2	Spring 1998	2	Grad
P465/566 – SW Eng 1	Fall 1997	32	Grad/Undergrad
B665 – SW Eng Mgmt 1	Fall 1997	2	Grad

## Graduate Capstone/Thesis Supervision

<b>Student</b>	<b>Year</b>	<b>Area</b>	<b>Current Location</b>
Kayce Reed	2008	MS/HCI	Interaction Design, Bloomington, IN
Erik Johnson	2008	MS/HCI	Interaction Design, Chicago, IL
Eldridge Doubleday	2007	MS/HCI	Interaction Design, Bloomington, IN
Vamsi Gadey	2007	MS/HCI	Interaction Design, Ebay, San Jose, CA
Dave Kintgen	2007	MS/HCI	Consultant, Cyber, Indianapolis, IN
Jackie Bauer	2006	MS/HCI	Interaction Design, SiteWorx, Reston, VA
Amanda Stephano	2006	MS/HCI	Consultant, Accenture, Chicago, IL
Vasudha Chandrasekaran	2005	MS/HCI	User Experience, Microsoft, Redmond, WA
Ben Murphy	2005	MS/HCI	Interaction Design, Abelson-Taylor, Chicago, IL
Sean Ellis	2004	MS/HCI	CTO, XPert Solutions, Grand Rapids, MI
Megan Lewis	2004	MS/HCI	Student, IU Law, Bloomington, IN
Christie Flynn	2004	MS/HCI	Interaction Design, Intel, Portland, OR
Paul White	2004	MS/Bioinformatics	SW Support, IU, Bloomington, IN

## Membership on PhD Advising Committees

<b>Student</b>	<b>Graduated</b>	<b>Area</b>	<b>Note</b>
John Springer	2007	CS	Database views and enterprise architecture
Steven Bogearst	2007	CS	Case-based reasoning
Nithya Vijayakumar	2007	CS	Grid computing and workflows
Ben Markines	2009	CS	Web Structure, Search, and Visualization
Le-Shin Wu	2009	CS	Peer-to-peer information retrieval

## Curriculum and Outreach Development

- 1) Designed the undergraduate capstone course sequence. Undergraduate capstones are almost group (2-4 students) projects, all of which have been supervised by me. The following table provides a listing of the undergraduate capstone projects that I have supervised. In total, I have supervised almost 1000 undergraduate seniors working on over 200 capstone projects.
- 2) Developed and direct the Informatics summer camp. This camp is designed to introduce high school students to the broad area of Informatics. Students are predominantly from groups traditionally under-represented in information technology (ethnic minorities, low-income, first generation, and women). The camp has expanded each year, and has received partial support from the Dr. Mike Mirro Foundation, as well as the John Deere Foundation.
- 3) Developed and deliver introductory and hands-on lab experiences for the IU Pathfinders summer camps. These students from middle schools and high schools are also from groups traditionally under-represented in information technology (ethnic minorities, low-income, first generation, and women). Over the last 4 years I have hosted over 500 students for these introductory sessions.
- 4) Developed an introduction to bioinformatics for high school students (also traditionally underrepresented) attending the Jim Holland Summer Enrichment program in Biology. This activity started in 2003, and has involved more than 200 students in 4 years. Co-delivered the material with Dr. Mehmet Dalkilic in 2005 and 2006.

- 5) Developed an introductory elective for the IU Groups program. The IU Groups program brings students to campus the summer prior to their freshman year for a six week course of study on mathematics, composition and general study skills. The Groups program prepares students that are considered at a higher risk for not completing the Baccalaureate, and is drawn from a predominantly first generation, ethnic minority and low income population of students. The informatics elective has been very popular with the students and has led to increased interest in the Informatics and Computer Science programs. Students in 2006 continued into Informatics and computer science courses at a higher than 50% rate.

## **Industrial Experience**

Prior to entering graduate school, I had substantial industry experience. Highlights from this experience are below:

1995 – 1996 Independent Software Development Consultant

- Designed and developed custom client/server applications, primarily within the pharmaceutical industry.

1994 – 1995 Director, Crawford Consulting, Inc.

- Responsible for Chicago regional business activities, including:
  - Customer and Proposal management
  - Hiring and staff development
- Researched and performed due diligence review for acquisition of a software company.

1990 – 1994 Manager, Systems Development, Moore Advanced Services, a Unit of Moore Business Forms

- Designed and developed electronic form based systems as the major component of a strategy to assist customers of Moore Business Forms decrease their reliance on pre-printed business forms.
- Managed five separate development groups in different geographical locations simultaneously.
- Provided presentations to customers and prospective business partners in support of sales activity. Presented technical and strategic topics at several professional seminars, including, XPLORE and Uniface user group.
- Developed annual strategic plan for system development, including financial, resource and product planning.
- Designed and developed an EDI ANSI X.12 based supply chain management system. With two coworkers, received U.S. Patent #5694551 for the system process.

1984 – 1990 Project Manager, Spectrum Healthcare Solutions, a Partnership of Baxter Healthcare and IBM Corporations

- Managed a team of programmers and analysts developing remote electronic linkages between physician offices and hospital systems. Implemented solutions at more than 75 major health care facilities.
- Managed a team of programmers developing electronic insurance claim processing software.
- Developed the IBM Doctor's Office Manager System physician practice management system. Systems were sold to more than 10,000 offices.

1983 – 1984 Consultant, Andrea Data Systems

- Developed custom applications for the wholesale distribution industry.