

Department of Computer Science
College of Engineering, Technology and Computer Science

Annual Report for
Calendar Year 2008

March 17, 2009

Peter A. Ng
Department Chair

Department Mission and Vision

Unit	Section	No.	Statement
	A-Mission	NA	<p>The Department strives to offer students excellent instruction and educational opportunities in Computer Science and Applied Computer Science as well as providing Information Science and Technology of CEIT with courses the program needed.</p> <p>It endeavors to provide its students a durable technical foundation in an environment of rapid technical change, to enable and promote their professional growth through contact with best professional practice, and to play a role of resource and technical leadership in the regional communities.</p> <p>Our programs prepare graduates to</p> <ol style="list-style-type: none"> 1) Analyze, design, implement, and evaluate a computerized solution to a real life problem using appropriate tools. 2) Communicate effectively through speaking, writing, and the use of presentation tools. 3) Work effectively as a team member. 4) Enter a professional computer science/information systems position or an appropriate graduate program. 5) Pursue life-long learning and continued professional development. 6) Be aware of ethical and societal concerns relating to computers in society and apply this knowledge in the conduct of their careers.

Department Goals and Accomplishments Calendar Year 2008

Unit	Section	No.	University Strategic Goals	Department Goals	List of 2008 Activities and Accomplishments	Bottom Line Metrics (Show at least 2 yrs' of data)
	B-Goals	1	Provide innovative, relevant, and rigorous academic programs	Offer excellent instructional and educational opportunities	Completed draft of program review report (06-07) which was submitted to VCAA for internal review in 2007. Revisit the report.	Collected new data for showing improvement
					Reviewed assessment process in view of revised ABET/CAC criteria.	<p>Realigned learning outcomes for undergraduate CS program with revised ABET/CAC criteria.</p> <p>Self-Study for undergraduate CS program began from Fall 2008.</p> <p>Collecting and revising all Spring and Fall 2008 syllabi to incorporate course and program learning outcomes. Plan to continue the process during Spring/Fall 2009. These will also be posted on the CS website.</p> <p>Preparing revised assessment plan for University approval. Plan will address both undergraduate and graduate CS programs.</p>

				Committed to incorporating Major Field Test as direct measure for undergraduate CS program.	Set up plan for all graduating seniors to take test beginning in Spring 2009 but no later than Fall 2009.
				Committed to including individual course survey data, which will assess achievement of specific course learning outcomes, as part of assessment process. Also committed to including program and curriculum assessment from Senior students' exit evaluation	All CS courses utilized survey in Spring and Fall 2008. Plan to continue this process through Spring and Fall 2009. Collected Graduate Senior Survey for the BS in CS from CS senior students.
				Continued use of external clients in CS 360/460, our CS capstone sequence.	Clients included Raytheon, Navistar International Corporation, ITT, IPFW ITS, and various medical professionals.
				Revised undergraduate curriculum for preparing students to meet market needs.	Removed CS 321 and added CS 232 as CS Core. Removed CS Elective but created 15 cr. hrs. of Concentration Area from Software Engineering, Network Computing, Informatics and Theoretical Foundations. Plan to offer Rich Internet Application course and Data Warehousing course in Spring 2009.

				Proposed a new undergraduate, Remnant Trust course in security (CS 445)	CS 445 is approved Plan to offer in Spring 2009
				Revisited and reexamined all the approved graduate courses with their pre-requisites to ensure partially the quality of the graduate program in CS.	Made and submitted for the approval for changes the prerequisites of the courses.
				Proposed two new graduate courses in databases (ACS 576) and security (ACS 545).	ACS 576 and ACS 545 have received approval. Set up to offer these courses in Fall 2009.
				Implemented thesis option for M.S. degree in Applied Computer Science.	Currently have one student pursuing thesis option. Plan to submit the proposal for thesis option in Spring 2009.
				Continued CS Professional Advisory Board.	Held two meetings at which PAB members provided feedback on recruitment and retention activities. Plan to have the meeting on campus during May 8, 2009.
				Committed to improve undergraduate student retention and graduate rate, as well as increasing enrollment through effective student recruitment.	Accessed all currently enrolled CS undergraduate students and re-assigned these students to faculty for advising. Set up Task Force for examining CS 112, CS 114, CS 160 and CS 161.

					Committed to increase ACS program's enrollment	Increased GTA and GRA. Recruited local students as well as out-of-state and international students.
					Committed to increase faculty research productivity	Provided tenured track faculty with mentorship and assistance for external funding activities.
					Proposed Informatics Minor.	Due to the scope and nature of the program, and dramatic changes in the Informatics undergraduate curriculum landscape, and due to the limited resources and ABET re-accreditation for CS undergraduate program, decided to launch the minor later.

Unit	Section	No.	University Strategic Goals	Department Goals	List of 2008 Activities and Accomplishments	Bottom Line Metrics (Show at least 2 yrs' of data)
	B-Goals	2	Create an exceptional campus environment for a diverse community of learners	Improve student-faculty interaction	Modified advising process to assign faculty advisors to all majors as soon as they qualify to take MA 153.	Set up advising procedure to ensure that all CS students are assigned to faculty members as their advisor and to ensure that all CS students having met their advisors before course registration taken place.

				Develop increased sense of community	Improved the environment (sofa, microwave, refrigerator, tables and chairs, wireless access) in ET 118, the student projects lab, to encourage more interaction among students.	Allowed CS students being together to share their knowledge and assist one another to overcome their difficulties.
					Organized student organizations including Student ACM Chapter, and others.	

Unit	Section	No.	University Strategic Goals	Department Goals	List of 2008 Activities and Accomplishments	Bottom Line Metrics (Show at least 2 yrs' of data)
	B-Goals	3	Promote the scholarly and creative achievements of faculty, students, and staff	Increase faculty and student research activity	Encouraged faculty to invite both undergraduate and graduate students to collaborate with them on research and independent study projects.	4 graduate, 6 undergraduate projects involving a total of 8 students. All projects lead to presentations; most also resulted in publications.
				Increase visibility of faculty and student achievements	Improved use of hallways Improved use of website	All bulletin boards and display cases given major overhaul and are updated on a 1-3 week cycle. Short articles are placed on CS home page to highlight faculty and student achievements as they occur.

Unit	Section	No.	University Strategic Goals	Department Goals	List of 2008 Activities and Accomplishments	Bottom Line Metrics (Show at least 2 yrs' of data)
	B-Goals	4	Advance economic development and the quality of life in Fort Wayne and the surrounding region	Play a role of resource and technical leadership	<p>Developed and taught IPFW ETCS Summer Camp, "Adventures in Computing for Teens" for talented middle and high school students</p> <p>Middle School Career Day</p> <p>Engaged in consulting activity that allows CS students to participate in implementing various projects.</p>	<p>22 participants. (Sedlmeyer) The two-week, ½ - day camp focused on learning programming principles using Alice, a system for creating and animating 3D virtual worlds. All participants completed and demonstrated independent projects to family and friends on the last day of the camp.</p> <p>Gave presentations to 16 groups of middle school students in each of 2006, 2007 and 2008 (Sedlmeyer, Parker)</p> <p>Served as consultant for Raytheon R&D project (Sedlmeyer)</p> <p>Actively pursuing projects with several companies through office of Community Engagement and CIID (Kim, Liu, Sedlmeyer, Stanchev, Yoo). Some proposals come to fruition during 2008 and other should come to fruition during 2009.</p>
Unit	Section	No.	University	Department	List of 2008 Activities and	Bottom Line Metrics

			Strategic Goals	Goals	Accomplishments	(Show at least 2 yrs' of data)
	B-Goals	5	Pursue the continuous improvement of university operations	None	None	

**Scholarly/Creative Activity Performed, Published, or Presented
During Calendar Year 2008**

Unit	Section	No.	Bibliography of faculty publications, performances, shows, etc.
	C- Research	1	<p>I. Articles in Scholarly Journals (Refereed Publications)</p> <p>Liu</p> <p>1. David Q. Liu and Jason Baker, “Streaming Multimedia over Wireless Mesh Networks,” <i>I.J. Communications, Network and System Sciences</i>, vol 1, No. 2, pp. 177 – 186, June 2008.</p> <p>Yoo</p> <p>2. Jin Soung Yoo and S. Shekhar, “Similarity-Profiled Temporal Association Mining,” <i>accepted to appear in the IEEE Transactions on Knowledge and Data Engineering (TKDE)</i>, 2008.</p> <p>Stanchev</p> <p>3. Jeffrey Pound, Lubomir Stanchev, David Toman, Grant E. Weddell, “On Ordering and Indexing Metadata for the Semantic Web’” in <i>Description Logics</i>, Dresden, Germany, published in CEUR-WS, volume 353, May 2008,</p> <p>II. Articles in Conference Proceedings (Refereed Publications)</p> <p>Kim</p> <p>4. Beomjin Kim, Keith Bock, Michael Burton, Rod Strong, Benjamin Aeschliman, “VisRFID: Visualizing Customer Behavior in Geotemporal Space using RFID Technology,” <i>Proceedings of the 20th International Conference on Software Engineering and Knowledge Engineering</i>, pp. 422-427, (2008). (This is a publication from a collaborative research with CS graduate student. The IPFW Office of Graduate Studies awarded a Graduate Student Travel Grant in the amount of \$250 to present the paper.)</p>

5. Chris Dunn, Anne-Marie Buibish, Jeff Stanford, Beomjin Kim, "TeamBuilder: Visualization for Identifying Project Team Quality in Multi-variant Resources," *Proceedings of the 19th Midwest Artificial Intelligence and Cognitive Science Conference*, pp. 166-171, (2008).

(This is a publication from a collaborative research with CS graduate students.)

Liu

6. David Q. Liu and Mark Coslow, "Extensible Authentication Protocol for IEEE Standards 802.11 and 802.16," *The 5th International Conference on Mobility Technology, Applications & Systems* (Mobility 2008), paper 5B-03, pp 1-9 September 2008

Ng

7. CS D Wei, S J Doong, SY Sung and PA. Ng, "On Solving the Problem of Semantic Heterogeneity in Clinical Information Systems," in *the Proceedings of the Fifth International Conference on Systems Integration*, Brasilia, Brazil, Nov 10-12, 2008 (in CD-Rom)

Yoo

8. Jin Soung Yoo and S. Shekhar, "Mining Temporal Association Patterns under a Similarity Constraint," in *Proceedings of International Conference on Scientific and Statistical Database Management (SSDBM)*, pp 401-417, Hong Kong, China, July 9-11, 2008.
9. Jin Soung Yoo and J. Hwang, "A Framework for Discovering Spatio-Temporal Cohesive Networks," in *Proceedings of The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, pp 1056-1061, May 2008.

III. Editorships of Journals

Kim

1. Member of Academic Review Board, *The International Journal of Computational Science (IJCS)*, Spring 2007-present.

2. Member of Editorial Board, *The KSII Transactions on Internet and Information Systems*, Spring 2007-present.

Liu

3. Associate Editor, *International Journal of Communications, Network and System Sciences*, 2007 - present

Ng

4. Editor-in-Chief for *Journal of Systems Integration* (Proposed 2008, in progress),
5. Editorial Board for *Data and Knowledge Engineering Journal*, North-Holland, since 1989.

Petruska

6. Editor of *Periodica Mathematica* of the Janos Bolyai Mathematical Society, Analysis Section

IV. Scholarly Service to the Profession

Kim

1. Conference Chair, *The 20th Midwest Artificial Intelligence and Cognitive Science Conference*, Fort Wayne, Indiana, April 18-19, 2009.

Ng

2. Program Chair, *the Fifth International Conference on Systems Integration*, Brasilia, Brazil, November 10-12, 2008

Yoo

3. Program Committee Members, *IEEE International Conference on Intelligent Transportation Systems(ITSC)*, 2008.
4. Session Chair, *International Conference on Scientific and Statistical Database Management(SSDBM)*, 2008.

5. Program Committee Members *IEEE International Conference on Tools with Artificial Intelligence(ICTAI)*, 2008.
6. Program Committee Members *IEEE International Workshop on Semantic Aspects in Data Mining (SADM),collocated with IEEE International Conference on Data Mining(ICDM)*, 2008.
7. Publication Co-Chair, *International Workshop on Spatial and Spatio-Temporal Data Mining(SSTDM)*, collocated with *IEEE International Conference on Data Mining(ICDM)*, 2008.
8. Session Chair, *International Pacific-Asia Conference on Knowledge Discovery and Data Mining(PAKDD)*, 2008.

V. Refereeing and Manuscript Reviewing

Liu

1. Reviewer, *ACM Transactions on Autonomous Adaptive Systems*,
2. Reviewer, *International Journal of Communications, Network and System Science*,
3. Reviewer, *2008 IEEE 67th Vehicular Technology Conference*,
4. Reviewer, *IEEE Transactions on Vehicular Technology*.

Petruska

5. Reviewer, *Periodica Mathematica Hungarica*.

Yoo

6. Reviewer, *IEEE Transactions on Knowledge and Data Engineering(TKDE)*,
7. Reviewer, *Data & Knowledge Engineering (DKE)*,
8. Reviewer, *Knowledge and Information Systems (KAIS)*,
9. Reviewer, *Geoinformatics*,
10. Reviewer, *SIAM Intern SIAM International Conference on Data Mining(SDM)*,
11. Reviewer, *International Conference on Advances in Databases*,
12. Reviewer, *IEEE International Conference on Tools with Artificial Intelligence*,

13. Reviewer, *International Workshop on Semantic Aspects in Data Mining*.
14. Reviewer, *International IEEE Conference on Intelligent Transportation System s(ITSC)*.

VI. Community Engagement including Public and/or Governmental Service Activities

Liu

1. Researcher and consultant, “wireless mesh network simulation,” Sierra Nevada Corporation
2. Reviewer, Canada Foundation for Innovation
3. National Science Foundation Grant Review Panelist
4. Chinese Translator, Northeast Indiana Regional Partnership and City of Bluffton
5. Reader, ETS, Advanced Placement in Computer Science

Sedlmeyer

6. As a consultant, served as System Architect and Lead Software Engineer for the Cognitive Capabilities IR&D project at Raytheon Network-Centric Systems. Successfully demonstrated prototype policy-based system that integrated intelligent agent technology with web services. I have been asked to be part of the team for a follow-on project, funded at \$500K, that will begin mid-February, 2009.
7. Successfully completed project with Lang Marketing done under a Technical Assistance Agreement. Project had a very short schedule (10 days) with a completion date of 12/23/08. Client was extremely pleased with the results and has since returned with two additional projects. I am currently writing a proposal for one of them and I encouraged Jin to do the second one (the problem involves analyzing large quantities of data to detect “interesting” patterns).
8. Party on a Patent Disclosure submitted by Raytheon for work performed two years ago as a consultant. Raytheon is seeking a patent for middleware I partially designed and implemented known as the Component Service Framework.

9. Part of delegation from ETCS to CRANE for purpose of exploring joint proposal development. Participated in several follow-up meetings to craft a proposal for an RFID project directed toward port security.
10. Served on Leo High School's Career Majors Academy Advisory Board.
11. Developed and taught IPFW ETCS Summer Camp, "Adventures in Computing for Teens." With 22 participants, it was the largest computing summer camp ever sponsored by the Computer Science Department. The two-week, 1/2-day, camp focused on learning programming principles using Alice, a system for creating and animating 3D virtual worlds. All participants completed and demonstrated independent projects to family and friends on the last day of the camp.
12. Met twice with the Computer Science Professional Advisory Board to communicate information about faculty, students, and programs and seek input on our self-study report.

C-2	Summary numbers of presentations
Presentations (other than conference presentations)	<p>Lecture or paper presented at professional meetings</p> <p>B. Kim</p> <ol style="list-style-type: none"> 1. Presentation, "Improving Security and Safety of U.S. Harbors using RFID Technology," <i>U.S. Coast Guard</i>, Washington D.C., June 20, 2008. 2. Presentation, "<i>Current Research in Data Visualization</i>," to a representative from Raytheon visiting at IPFW, September 4, 2008. 3. Presented a paper at <i>The 20th International Conference on Software Engineering and Knowledge Engineering</i>, Redwood City, CA, July 1-3, 2008 (Presented by a research student). 4. Presented a paper at <i>The 19th Midwest Artificial Intelligence and Cognitive Science Conference</i>, Cincinnati, OH, April 12- 13, 2008 (Presented by a research student). <p>Liu</p> <ol style="list-style-type: none"> 5. "Improving Security and Safety of U.S. Harbors using RFID Technology", presented to <i>US Coast Guards</i> on June 20, 2009, Washington, DC. <p>Ng</p> <ol style="list-style-type: none"> 6. As a distinguished speaker, On Solving the Problem of Semantic Heterogeneity in Clinical Information Systems, <i>the Fifth International Conference on Systems Integration</i>, Brasilia, Brazil, November 10-12, 2008 <p>Yoo</p> <ol style="list-style-type: none"> 7. Presented "Mining Temporal Association Patterns under a Similarity Constraint", <i>at the International Conference on Scientific and Statistical Database Management (SSDBM 2008)</i>, Hong Kong, China, July 9-11, 2008. 8. Presented "A Framework for Discovering Spatio-Temporal Cohesive Networks", <i>at the Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)</i>, Osaka, Japan, 20-23 May 2008 9. Presented "Methods for Interesting Association Patterns from Spatial, Temporal, Spatio-temporal Data", to <i>the Database/Bioinformatics Laboratory, Chungbuk National University</i>, Korea, June 2, 2008 10. Presented "Interesting Association Patterns from Spatial, Temporal, Spatio-temporal Data, and the Mining

Summary numbers of presentations

- Methods”, to *the Spatio-Temporal Database Laboratory, Pusan National University, Korea*, June 3, 2008
11. Presented “Domain Aware Support System for Coastal Monitoring”, to the *U.S. Coast Guard, Washington D.C.*, June 20, 2008
 12. Presented “Spatial and Spatio-temporal Data Mining”, to *a representative of Raytheon* at IPFW, Sep 4, 2008

Sedlmeyer

13. Participated as a domain expert in two panel discussions associated with the Indiana Future City Competition: the Future City Educator Workshop and the Essay Help Session.
14. Represented IPFW at Raytheon’s Engineering Week celebration. Demonstrated robot and explained Computer Science offerings to prospective students and their parents.
15. Presented “Computer Science: More Than You Think!,” at 2008 IPFW Middle School Career Day. Created and presented (16 times!) an interactive talk.
16. Made presentation on Computer Science programs to the Whitley County Economic Development Round-table.

Unit	Section	No.	Listing of grants/contracts awarded in 2008
	C- Research	3	<p>I. External Grants/Contracts Awarded</p> <ol style="list-style-type: none"> 1. Sedlmeyer, Raytheon Community Involvement Grant, “Enabling a Capstone Experience for Computing Majors,” \$5,000. 2. Sedlmeyer, Raytheon Community Involvement Grant, “Using the RoboCup Competition to Enhance Engineering and Computer Science Education at IPFW,” \$9,900. 3. Stanchev, IPFW ORES for working research in the summer at the University of Waterloo, \$1000. 4. Yoo, 2008 IPFW Summer Faculty Grant for Research, \$8,000. <p>II. Internal Grants/Contracts Awarded</p> <ol style="list-style-type: none"> 1. Kim, request for Benjamin Aeschliman, <i>The Office of Graduate Studies Graduate Assistantship</i>, IPFW, 2008-2009, \$12,740 stipend with a remission of tuition. 2. Kim, request for Angela Gorrell, <i>IPFW Undergraduate Summer Research Support Program</i>, “Viewing Browsing History Using Treemaps,” IPFW, 2008, \$1,000. 3. Kim, request for Michael Burton, <i>IPFW Graduate Student Travel Grant</i>, IPFW, 2008, \$250. 4. Liu, Remnant Trust Curriculum Development Award, \$500. 5. Liu, Purdue Research Foundation (PRF) International Travel Grant, \$1000.00. 6. Liu, Indiana University Overseas Conference Fund Grant, \$750.00. 7. Liu, IPFW Overseas Conference Fund, “The Mobility Conference”, \$600.00. 8. Yoo, IU 2008 Overseas Conference Fund, Indiana University (Granted) 9. Yoo, <i>PRF 2008 Overseas Conference Fund</i>, Purdue University (Granted) 10. Yoo, <i>IPFW 2008 Overseas Conference Fund</i>, Indiana U-Purdue U, Fort Wayne (Granted) <p>III. Grant Proposals for Research and Creative Endeavor in Progress</p> <ol style="list-style-type: none"> 1. Kim, Liu, Stanchev, Yoo, et al., “Sea Terrorist Reconnaissance, Analysis, Capture and Enforcement System (Sea TRACES)”, Computer Science, STIMULUS Engineering, and Penn State Electro-Optic Center, Sep. 23, 2008 [Pending] 2. Kim, Liu, Yoo, et al., “Improving Security and Safety of U.S. Harbors using RFID Technology”, presented to US Coast Guards on June 20, 2009, Washington, DC. 3. Stanchev, an NSF CAREER grant proposal with title: Using Static SQL to Develop Embedded Control Programs. The proposal amount was above \$500,000. The proposal was rejected, but received a lot of positive feedback.

Unit	Section	No.	Bibliography of notable student accomplishments
	C-	4	<p data-bbox="464 321 877 391">I. Student Research Direction Kim</p> <ol data-bbox="512 435 1894 1414" style="list-style-type: none"> <li data-bbox="512 435 1894 505">1. Jon Scott, "Visualizing Digital Library Search Results," <i>Proceedings of the 20th Annual Undergraduate Research Conference</i>, Butler University, pp. 44, 2008. <li data-bbox="512 542 1894 646">2. SeungEun Kim, Jon Scott, Benjamin Aeschliman, "Graphical Representation of Book Index for Digital Library Searching System," <i>Proceedings of the 2008 Student Research and Creative Endeavor Symposium</i>, IPFW, 2008. <li data-bbox="512 683 1894 753">3. Angela Gorrell, Presentation at <i>Indiana Council of Engineering Societies</i>, "Visualizing Web Browsing Histories using Tree Maps," Indianapolis, IN, October 17, 2008. <li data-bbox="512 790 1894 938">4. Student research advising for Benjamin Aeschliman (Graduate), Summer 2004-present Project Title: Visualizing Relevancy of Documents to Search Terms in a Vector Space Project Title: A Visualization System for Tracking Human Activities in Spatiotemporal Spaces using RFID Technology <li data-bbox="512 976 1894 1045">5. Student research advising for Angela Gorrell (Undergraduate), Spring 2008-present Project Title: Viewing Browsing History Using Treemaps <li data-bbox="512 1083 1894 1153">6. Student research advising for Jon Scott (Graduate), Spring 2008-present Project Title: Visualizing Digital Library Search Results <li data-bbox="512 1190 1894 1305">7. Student research advising for Michael Baeske (Undergraduate), Fall 2008-present Project Title: A Visualization of Police Statistics Utilizing Dimensional Comparisons with Respect to Geographic Spatial Information <li data-bbox="512 1343 1894 1414">8. Student research advising for Chris Dunn (Part-time Instructor), Fall 2007-Spring 2008 Project Title: TeamBuilder: Visual Interface for Identifying Optimal Project Team in Multi-variant

Resources

Sedlmeyer

1. Served as leader of IPFW Robocup Team that includes faculty from CS and Engineering, practicing engineers, and students. Currently focused on developing software for our Pioneer 3DX robot from MobileRobots Inc., to accomplish RoboCup Technical Challenge 1.
2. Co-authored with Jim Jacobs, Amy Lang, John Watts, John Bryan and Kathie Irk, “An Architecture for Policy-based C2 Decision Support Systems,” published in the Proceedings of the 13th International Command and Control Research and Technology Symposium, Bellevue, WA, July 17-19, 2008. My coauthors were all part of the Cognitive Capabilities R&D team I worked with during the year as a consultant at Raytheon.

**Community Involvement/Economic Development/Engagement Activities
For Calendar Year 2008**

Unit	Section	No.	Category	Community Partner	Activity	Metrics/Impact
	D-Community	1	Ongoing Partnerships	Raytheon Network Centric Systems	As consultant, served as System Architect for the Cognitive Capabilities IR&D project aimed at improving performance of MANET. (Sedlmeyer)	

Unit	Section	No.	Category	Community Partner	Activity	Metrics/Impact
	D-Community	2	Researcher and consultant	Sierra Nevada Corporation	Wireless mess network simulation (Liu)	
				Canada Foundation for Innovation	Review policy (Liu)	

Unit	Section	No.	Category	Community Partner	Activity	Metrics/Impact
				Northeast Indiana Regional Partnership and City of Bluffton	<i>Chinese Translator (Liu)</i>	
	D-Community	3	Academic Organization	National Science Foundation	Gant Review Panelist (Liu)	
				ETS Advanced Placement in Computer Science	Reader (Liu)	
				Future Cities	Workshop presenter (Sedlmeyer, 2 times)	
				Leo High School Career Majors Academy Advisory Board	Served as a member of the Board (Sedlmeyer)	
				Computer Science Professional Advisory Board	Met twice to communicate information about faculty, students and programs and seek input on our self-study report. (Sedlmeyer)	

Unit	Section	No.	Category	Community Partner	Activity	Metrics/Impact
	D-Community	4	Industrial Partnersh	Lang Marketing	Under a Technical Assistance Agreement, completed assigned project within a short period (Sedlmeyer)	Consequently, two additional projects are proposed with a problem involving analyzing large quantities of data to detect “interesting” patterns.

				Raytheon	Seeking a patent for middleware in which I partially designed and implemented known as the Component Service Framework (Sedlmeyer)	

Accomplishments of Diversity Goals, Initiatives, and Metrics During Calendar Year 2008

Unit	Section	No.	Strategic Theme	Unit Goals	Accomplishment(s)	Metrics
	E-Diversity	1	Student Recruitment and Retention	???	Continued to establish RoboCup Team to aid in recruiting prospective student who might have a background or interest in robotics, e.g., as a result of participating in First Lego League or VEX.	
					IPFW ETCS Summer Camp Developed and taught “Adventures in Computing for Teens” Two-week, ½-day, camp focused on learning programming principles using Alice, a system for creating and animating 3D virtual worlds. (Sedlmeyer)	All participants completed and demonstrated independent projects to family and friends on the last day of the camp.

Unit	Section	No.	Strategic Theme	Unit Goals	Accomplishment(s)	Metrics
	E-Diversity	2	Faculty & Staff Recruitment and Retention	???	Hired Dr. Urcun John Tanik as Assistant Professor.	<u>Male</u> White, born in U.S.: 2 White, not born in U.S.: 0 Asian: 1 B/AfrA: 0

						Female: 0
					Proceed to hire another Assistance Professor (an opening created by David Erbach's resignation)	

Unit	Section	No.	Strategic Theme	Unit Goals	Accomplishment(s)	Metrics
	E-Diversity	3	Campus Climate	???		

Unit	Section	No.	Strategic Theme	Unit Goals	Accomplishment(s)	Metrics
	E-Diversity	4	Curriculum (including requirements from accrediting agencies, if applicable)	???		

Unit	Section	No.	Strategic Theme	Unit Goals	Accomplishment(s)	Metrics
	E-Diversity	5	Community Outreach	Create outreach presentation	As a result of participation in IU's Bring IT On! Workshop, we have created a presentation titled, "Computer Science: More Than You Think!" which will be given to area middle-school and high-school audiences.	
					Represented IPFW at Raytheon's Engineering Week celebration, Demonstrated robot and explained Computer Science offerings to prospective students and their parents. (Sedlmeyer)	
					Made presentation on Computer Science programs to the Whitley County Economic Development Roundtable (Sedlmeyer)	

Goals and Objectives for Academic Year 2009-10

Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	1	Provide innovative, relevant, and rigorous academic programs	Offer excellent instructional and educational opportunities	Prepare for 2010 ABET review.	<p>Ensure all necessary assessment procedures are in place and data collection, analysis and feedback are being performed.</p> <p>Update course binders as necessary.</p> <p>Plan and complete self-study effort.</p>
					Complete review of Informatics Minor.	Due to the scope and nature of the program, and dramatic changes in the Informatics undergraduate curriculum landscape, and due to the limited resources and ABET re-accreditation for CS undergraduate program, decided to launch the minor no early than after ABET review process completed.
					Improve the quality of the MS in ACS including establishing a better curriculum with well defined course prerequisites and a thesis option. Also develop concentration areas for MS in ACS.	Define at least two concentration areas that take advantage of both regional needs and faculty expertise.

					Develop MS in Software Engineering
					<p>Continue to develop an effort to offer undergraduate BA program in CS via on-line.</p> <p>Offer on-line version of CS 160 and 161 in Fall 2009 and Spring 2010.</p>
					<p>Continue to pursue collaboration with Engineering and CEIT.</p> <p>Finalize version of CS 260 that engineering majors can take.</p> <p>Continue to support ECE majors in CS 360.</p> <p>Continue to support CS 221 and 222 that engineering majors can take.</p> <p>Continue to support IST majors in CS 364 and 365.</p> <p>Continue to investigate EE and ECE courses that could be opened to CS majors.</p>
					Revitalize CS 160H and develop other honor courses

					Adopt subset of recommendations made in program review report for BS in CS.	
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Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	2	Create an exceptional campus environment for a diverse community of learners	Enable student professional growth	Utilize graduate assistants in teaching one or more CS service courses.	Hire 1-3 Graduate Teaching Assistants.
					Encourage more students to take advantage of co-op and internship opportunities.	At least 10 students participate.

Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	2	Create an exceptional campus environment for a diverse community of learners		Improve the sense of community among computing students and faculty.	Continue to sponsor quarterly (or more frequent) social outings.

Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	3	Promote the scholarly and creative achievements of faculty, students, and staff	Increase faculty and student research activity	These goals are carried over, with slight adjustments, from 2007-08	
					Increase national/international peer-reviewed publication and conference article submissions	By 200% as compared to AY 2006.
					Increase external sponsored research submissions.	By 200% as compared to AY 2006.
					Increase internal sponsored research submissions	By 300% as compared to AY 2006.
					Collaborate more with fellow faculty members in the department, sister departments and schools/colleges.	Form two or more small research groups by the end of AY 2009. Form at least one research core by the end of AY 2009.

Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	4	Advance the economic development and quality of life in Fort Wayne and the surrounding region	Play a role of resource and technical leadership	Offer expertise of faculty and students through Office of Community Engagement and CIID.	Collaborate on at least three projects.
					Continue to offer Adventures in Computing for Teens (ACT)	Increase participation of students to 20 and attract at least three teachers.

Unit	Section	No.	University Strategic Goals	Department Goals for 2009-10	Specific Tasks & Objectives for 2009-10	Bottom Line Targets (as compared to this year)
	F-Next Year	5	Pursue the continuous improvement of university operations	Continue to communicate excellence	Increase use of University Relations to tell story of successful student efforts, faculty, alumni, staff, etc.	At least a half-dozen press releases during 2008-09.
					Continue frequent updating of material in our hallways.	Once a week.
					Update CS website montly to include the above.	

Resource Requests for 2009-10 and Beyond

Unit	Section	No.	Category	Item (List in priority order)	Cost and Sources of Funds	Rationale
	G-Resource Requests	1	New Position Requests	Keep an Assistant Professor position.	\$70-75K.	To replace David Erbach's resignation

Unit	Section	No.	Category	Item (List in priority order)	Cost and Sources of Funds	Rationale
	G-Resource Requests	2	Equipment Requests	Upgrade labs	42 workstations in ET 109 and ET 111. External funding.	May have to invest in memory upgrades to run Windows Vista and next generation program development environments. This is important for the ABET's re-accreditation process in 2009-2010
				4 faculty PC workstation in their office	\$10K New funding.	To replace and upgrade faculty workstations.
				Personal robot platforms	\$5K External funding.	Support recruitment initiative by introducing robotics into the curriculum, i.e., new approach to teaching CS160H using robots.

				Router/Switch for projects labs	\$3-5K. External funding.	Current switch cannot support number of servers and other equipment now utilized in lab.
				RFID equipment	\$5-10K. External funding	Support research in networking, data mining, and visualization.

Unit	Section	No.	Category	Item (List in priority order)	Cost and Sources of Funds	Rationale
	G-Resource Requests	3	Space/Remodeling Requests	None		

Unit	Section	No.	Category	Item (List in priority order)	Cost and Sources of Funds	Rationale
	G-Resource Requests	4	Other new funding requests, including, lab materials, S&E, etc.	Two R.A. positions	\$8K * 2 = \$16K (plus tuition)	Granting more R.A. positions will be an effective approach to enhance the quality of education for our majors, to recruit higher quality students, and to enhance their career development through research and teaching, especially for the students who are planning to develop their career at academic institutions.

