Professional Advisory Board Meeting

Department of Computer Science
April 7, 2017
# Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Scheduled item</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:20am – 9:30am</td>
<td>Welcome and Introduction (Dean Manoochehr Zoghi)</td>
</tr>
<tr>
<td>9:30am – 10:00am</td>
<td>Report on CS Dept and Programs (BKim)</td>
</tr>
<tr>
<td>10:00am – 10:10am</td>
<td>Report on CS Program Assessment (David)</td>
</tr>
<tr>
<td>10:10am – 10:20am</td>
<td>Report on CS Graduate Program (Jin Soung)</td>
</tr>
<tr>
<td>10:20am – 10:30am</td>
<td>Report on IS program (Adolfo)</td>
</tr>
<tr>
<td>10:30am – 10:45am</td>
<td>Catch-up &amp; Break</td>
</tr>
<tr>
<td>10:45am – 12:00pm</td>
<td>Open Discussion</td>
</tr>
<tr>
<td>12:00pm – 12:40pm</td>
<td>Lunch with CS faculty</td>
</tr>
<tr>
<td>12:40pm – 1:10pm</td>
<td>Closed Meeting for PAB Recommendations</td>
</tr>
</tbody>
</table>
Welcome and Introduction

Manoochehr Zoghi, Dean of ETCS
Report on CS Dept and Programs

Beomjin Kim, Chair of CS Dept
Report on PAB Recommendation

• Recommendation from the previous PAB meetings

1. Increase dual credit courses offered in high schools; Promote CS as a field in high schools
2. Enhance curriculum emphasizing the “real-world” process; Enhance the alignment between the CS curriculum and the needs of the local community
3. Expand the breadth and depth of skills and knowledge covered in the four-year B.S. program
4. Increase the frequency of communication with the PAB and provide update on department activities
5. Establish cooperative work experiences and internships
Report on PAB Recommendation

1. Increase dual credit courses offered in high schools; Promote CS as a field in high schools
   - Six participating schools
     - Canterbury, Concordia, Dekalb, Huntington North, Wayne, Manchester (Insufficient enrollment)
   - Offer four dual-credits courses
     - CS 112 – Survey Of Computer Science
     - CS 114 – Introduction To Visual Basic
     - CS 160 – Intro To Computer Science I
     - CS 161 – Intro To Computer Science II
Report on PAB Recommendation

1. Increase dual credit courses offered in high schools; Promote CS as a field in high schools

<table>
<thead>
<tr>
<th>Year</th>
<th>Num of schools</th>
<th>Students</th>
<th>Cr. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/12</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2012/13</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2013/14</td>
<td>3</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>2014/15</td>
<td>7</td>
<td>69</td>
<td>228</td>
</tr>
<tr>
<td>2015/16</td>
<td>7</td>
<td>50</td>
<td>161</td>
</tr>
<tr>
<td>2016/17</td>
<td>5</td>
<td>99</td>
<td>325</td>
</tr>
</tbody>
</table>
Report on PAB Recommendation

1. Increase dual credit courses offered in high schools; Promote CS as a field in high schools

- Will offer first online CS112 dual credits course at Homestead in Fall 2017
- Facilitate high school students to take IPFW CS courses
- Host High School Programming Challenge, “Adventures in Computing for Teens” summer camp, etc.
- Participate Sci-Tec Academy, Science Central day, Campus Visit Day, Experience Day, etc.

<table>
<thead>
<tr>
<th>CS112</th>
<th>CS114</th>
<th>CS160</th>
<th>CS161</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>12</td>
<td>25</td>
<td>3</td>
</tr>
</tbody>
</table>
Report on PAB Recommendation

2. Enhance curriculum emphasizing the “real-world” process; Enhance the alignment between the CS curriculum and the needs of the local community

3. Expand the breadth and depth of skills and knowledge covered in the four-year B.S. program
   - Put emphasis on project management techniques, testing, and formal technical reviews at capstone courses
   - Will add three concentration areas: 1) Data Science, 2) Internet of Things / HCI / Robotics, 3) Cybersecurity
Report on PAB Recommendation

4. Increase the frequency of communication with the PAB and provide update on department activities

- Continuous partnership through capstone projects
- Communicate/visit City of FW, Do it Best, Medical Protective, Parkview Health, Regal Beloit, Trelleborg, etc.
- Invite CS/IS alumni as PAB members and mentors
- Guest talks to senior and junior students
  - Matthew Noggle from Aptera
  - Kevin Stoller, Dept. of Communication
Report on PAB Recommendation

4. Increase the frequency of communication with the PAB and provide update on department activities

- Internet of Things Symposium, Dec 7, 2016
- The 28th Modern Artificial Intelligence and Cognitive Science Conference (MAICS), April 28-29, 2017, Steel Dynamics Keith E. Busse Alumni Center
- ETCS Projects Day, May 5th, 11:30~2:30pm, Helmke Library Learning Commons
- Flyers for events in the package
Report on PAB Recommendation

5. Establish cooperative work experiences and internships

- Co-op Edu & Internships (Fall 2012-present)
  - 22 placements at 7 companies
  - Co-op (14), Internships (8)
  - Total Number of Students: 14
  - CS (16), IS (6) students

- Debra Barrick, Director, (260) 481-5471, Office of Academic Internships, Cooperative Education and Service Learning
Fall to Fall Enrollment (2011 – 2016)

Student Enrollment (Fall 2011 – 2016)

Fall Enrollment Data (Students)

<table>
<thead>
<tr>
<th>Year</th>
<th>CS Total</th>
<th>ETCS Total</th>
<th>IPFW Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>313</td>
<td>1,896</td>
<td>14,326</td>
</tr>
<tr>
<td>2012</td>
<td>308</td>
<td>1,814</td>
<td>13,771</td>
</tr>
<tr>
<td>2013</td>
<td>316</td>
<td>1,757</td>
<td>13,459</td>
</tr>
<tr>
<td>2014</td>
<td>349</td>
<td>1,736</td>
<td>13,214</td>
</tr>
<tr>
<td>2015</td>
<td>346</td>
<td>1,681</td>
<td>12,719</td>
</tr>
<tr>
<td>2016</td>
<td>361</td>
<td>1,707</td>
<td>12,289</td>
</tr>
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</table>

Fall Enrollment Data (Percentile)

<table>
<thead>
<tr>
<th>Year</th>
<th>CS Total</th>
<th>ETCS Total</th>
<th>IPFW Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2012</td>
<td>-1.60%</td>
<td>-4.32%</td>
<td>-3.87%</td>
</tr>
<tr>
<td>2013</td>
<td>0.96%</td>
<td>-7.33%</td>
<td>-6.05%</td>
</tr>
<tr>
<td>2014</td>
<td>11.50%</td>
<td>-8.44%</td>
<td>-7.76%</td>
</tr>
<tr>
<td>2015</td>
<td>10.54%</td>
<td>-11.34%</td>
<td>-11.22%</td>
</tr>
<tr>
<td>2016</td>
<td>15.34%</td>
<td>-9.97%</td>
<td>-14.22%</td>
</tr>
</tbody>
</table>
Graduation by Year

CS Graduation by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>CS in BS&amp;BA</th>
<th>IS in BS&amp;BA</th>
<th>ACS in MS</th>
<th>Head count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
<td>14</td>
<td>N/A</td>
<td>9</td>
<td>242</td>
</tr>
<tr>
<td>2011-2012</td>
<td>14</td>
<td>20</td>
<td>16</td>
<td>313</td>
</tr>
<tr>
<td>2012-2013</td>
<td>20</td>
<td>21</td>
<td>5</td>
<td>308</td>
</tr>
<tr>
<td>2013-2014</td>
<td>24</td>
<td>24</td>
<td>15</td>
<td>316</td>
</tr>
<tr>
<td>2014-2015</td>
<td>29</td>
<td>18</td>
<td>4</td>
<td>349</td>
</tr>
<tr>
<td>2015-2016</td>
<td>26</td>
<td>23</td>
<td>10</td>
<td>346</td>
</tr>
</tbody>
</table>
Major Achievement in 2016-17 AY

- Grants & Publication
  - Over $1M external funding & $1.5M in review
    - Dr. Licato, Air Force, $360k, 2016-2019
    - Dr. Ng, NSF, $650k, 2016-2021
    - Drs. Coronado, Kim, IN-Mac, $94k+, 2016, 2017
    - Dr. Chen, Harris, $30k, 2016-2017
    - Dr. Licato & IAV Center, Targamite LLC, $40k+, 2017
    - Dr. Kim, Parkview Health System, $30k, 2016-2017
  - More than 15 research articles in past two AY
Major Achievement in 2016-17 AY

• Student Achievement
  - Employment at AutoDesk, Google, MathWorks, Moody’s Analytics, CRANE, Northrop Grumman, local industries
  - Graduate school at IUB, PUWL, Savannah College of Art and Design, U of Virginia, U of Wisconsin-Madison
  - Three senior capstone students and Dr. Chen, IEEE Standards Education Grant
  - Three students at ACoRL received $1k from Honor Prog.
  - Research publications
    - Kurtis Taylor, Dr. Chen, HotPOST 2017, Atlanta, GA
    - Dr. Licato & advisees, Four papers at MAICS, Two journals under review
## Senior Capstone Projects

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Executed / Collected</th>
<th>External Sponsor</th>
<th>Research-oriented</th>
<th>Internal Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>10 / 16</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2015-2016</td>
<td>10 / 14</td>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2016-2017</td>
<td>8 / 13</td>
<td>9</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2017-2018 (Apr. 6, 2017)</td>
<td>8-10/13+2</td>
<td>8 (2)</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Senior Capstone Projects

• Project Sponsors
  - Allen County Public Library, Do it Best, Allied Payment Network, City of Fort Wayne, Extension Healthcare, Lincoln Financial Group, NeighborLink Fort Wayne, Parkview Health, Parkview Research Center, Regal Beloit, RINEHOLD Nutrition Services, etc.

• 2016-2017 AY Senior Capstone Presentation, Apr. 28, 2017 from 1:00pm in KT246

• Students retain ownership of IP created in their courses

• PU does not interfere with a sponsor's ability to negotiate directly with the students regarding IP right
Other Announcement

• Faculty left or will leave
  ➢ Karim Elish, Anyi Liu, John Licato

• New faculty
  ➢ Aleshia Hayes (TT), Robert Sedlmeyer (LTL), Rex Peters (LTL), Max Fowler (LTL)
  ➢ Ongoing faculty search for a Continuing Lecturer and a Visiting Assistant Professor in Fall 2017

• CS Scholar Chat – Peer mentoring program on Programming, Data Structure, Math courses
Program Educational Objectives

- Describe what graduates are expected to attain within a few years after graduation. PEO are based on the needs of the program's constituencies.
CS Program Educational Objectives

To produce graduates who
1. are able to apply the theoretical and technical computer science knowledge to analyze, design, implement, test, and maintain high quality computer-based solutions;
2. hold professional computer science/information systems positions or pursue graduate studies in computer science or other related degrees;
3. exhibit skills in effective oral and written communication, leadership, and are able to work individually and in diverse teams;
4. contribute to Fort Wayne and the greater northeast Indiana region economy as productive and successful professionals in computing and information systems;
5. pursue lifelong learning in their computing professions;
6. demonstrate commitment to high ethical and professional standards within the community and profession.

Please Complete a Questionnaire in the Folder
Question on
CS Dept or Programs?
Report on CS Program Assessment

David Liu, Chair of Assessment Committee
Report on CS Program Assessment

• Updated Professional Educational Objectives (PEO)
• Adopted CAC-ABET Student Outcomes (SOs)
• Developed Direct Measure for SOs
• Submit 2015 – 2016 Assessment Reports to ETCS and IPFW for BS CS & BS IS
• 2016 BS CS Assessment Report
PEOs

1. are able to apply the theoretical and technical computer science knowledge to analyze, design, implement, test, and maintain high quality computer-based solutions; [Professional Quality]
2. hold professional computer science/information systems positions or pursue graduate studies in computer science or other related degrees; [Career Success]
3. exhibit skills in effective oral and written communication, leadership, and are able to work individually and in diverse teams; [Communication, Team & Diversity]
4. contribute to Fort Wayne and the greater northeast Indiana region economy as productive and successful professionals in computing and information systems; [Economic Impact]
5. pursue lifelong learning in their computing professions; [Lifelong Learning]
6. demonstrate commitment to high ethical and professional standards within the community and profession. [Professionalism, Ethics]
SOs

a. An ability to apply knowledge of computing and mathematics appropriate (to the program’s student outcomes and) to the discipline.
b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
c. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
d. An ability to function effectively on teams to accomplish a common goal.
e. An understanding of professional, ethical, legal, security and social issues and responsibilities.
f. An ability to communicate effectively with a range of audiences.
SOs

g. An ability to analyze the local and global impact of computing on individuals, organizations, and society.

h. Recognition of the need for and an ability to engage in continuing professional development.

i. An ability to use current techniques, skills, and tools necessary for computing practice.

j. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.

k. An ability to apply design and development principles in the construction of software systems of varying complexity.
Direct Measures for SOs

- Each course focuses 5 – 7 SOs
- Each SO is measured from student scores in
  - exam questions
  - Projects
- Faculty reports the average score for each SO and make recommendations for improvement if average score is less 60%
- Average score for each SO from student on-line course learning outcome survey (indirect measure) is reported as well (indirect measures)
2016-2017 Assessed Courses

• Fall 2016
  ➢ CS 112, CS 160, CS 161, CS 271, CS 274, CS 306,
  ➢ CS 321, CS 360, CS 364, CS 368, CS 372, CS 380,
  ➢ CS 460, CS 467, CS 486

• Spring 2017
  ➢ IST 160, IST 203, IST 270, IST 466 (CS 466),
  ➢ CS 161, CS 229, CS 232, CS 260, CS 350, CS 465, CS 472

• Summer 2017
  ➢ CS 331
Fall 2016 BS CS Assessment Report

• Course Assessment
  ➢ Direct Measures of SOs
  ➢ Indirect Measures of SO

• Senior Capstone Project

• Co-op

• Graduate Exit Survey
Fall 2016 Assessment Recomm’s

• Work with Curriculum Committee to update concentration areas with feedbacks from employers’ survey (PEO direct) and Alumni survey, PAB, and Admittance to graduate school (PEO indirect).

• Work with Curriculum Committee to add new courses and update existing courses to effectively measure SOs: d, e, f, g, h.

• Update Assessment Plan and Report with feedback from ETCS Assessment Committee
Report on CS Program Assessment

• Questions
  ➢ Q1
  ➢ Q2

• Suggestions
  ➢ S1
  ➢ S2
Report on CS Graduate Program

Jin Soung Yoo, Graduate Program Director
Graduate Program Name Changed

Applied Computer Science

Computer Science

Purdue final approval and official change on March 2017
Name Change Rationale

• Since 1997, we have offered a Purdue M.S. (Master of Science) degree, not a degree in applied science
• Our program is even not a joint master program with other programs
• Our program has enhanced over the past 20 years with including many sub areas in CS as well as software engineering
• As our PAB’s advice, the previous name was not attractive for employers and students
5-Year Combined Program

4+1 Program for Dual Degrees
B. S. in Computer Science and M. S. in Computer Science

Expected date of initiation: Fall 2017
(Waiting for Purdue Final Approval ...)
Rationale and Need

• Improve the undergraduate program by making it more attractive for prospective students
• Improve the graduate program by integrating and retaining high-quality undergraduate students
• Provide the local workforce with higher education to better serve in the Northeast Indiana region
• Match the offerings of combined BS/MS program in computer science throughout Indiana and nationwide
Admission Requirements

• Undergraduate students enrolled in the BS program in CS at IPFW

• Students must have finished at least 60 credit hours (usually in their 5th or 6th of undergraduate semesters)

• Students must have achieved an undergraduate GPA of at least 3.0

• No GRE is required
Degree Requirements

• The degree requirements of the combined BS/MS program are the same as pursuing the degrees separately EXCEPT
  • 9 credits of graduate level CS courses are used for both BS and MS.

• Total credit hours for the dual degrees: 141
  • 120(BS) + 30 (MS) - 9
CS Graduate Program Size

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of CS graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>24</td>
</tr>
<tr>
<td>2012-2013</td>
<td>17</td>
</tr>
<tr>
<td>2013-2014</td>
<td>23</td>
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<tr>
<td>2014-2015</td>
<td>26</td>
</tr>
<tr>
<td>2015-2016</td>
<td>32</td>
</tr>
<tr>
<td>2016-2017</td>
<td>28</td>
</tr>
</tbody>
</table>
Expected Size with the New Program

• Survey result
  • 81% of current CS undergraduate students (participated in the survey) are interested in.
    • 20 seniors, 11 juniors, 14 sophomores and 6 freshmen
  • 87.5% of PAB members support.

• Expected a large increase of 40% or 50% in the CS graduate program size, e.g., with 14 qualified current seniors.
Report on Information Systems

Adolfo Coronado, Assistant Professor of IS
Report on IS program

• IS Program growth
• Strong engagement with local industry
• Future direction
IS Program Enrollment

![Bar Chart]

CS UG INSY

<table>
<thead>
<tr>
<th>Term</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>201410</td>
<td>77</td>
</tr>
<tr>
<td>201420</td>
<td>74</td>
</tr>
<tr>
<td>201510</td>
<td>77</td>
</tr>
<tr>
<td>201520</td>
<td>61</td>
</tr>
<tr>
<td>201610</td>
<td>63</td>
</tr>
<tr>
<td>201620</td>
<td>59</td>
</tr>
<tr>
<td>201710</td>
<td>79</td>
</tr>
<tr>
<td>201720</td>
<td>82</td>
</tr>
</tbody>
</table>
Engagement

• Strong engagement with local industry
  • 4 projects
  • ~$99,000
  • Experiential learning opportunities for 5 students
• More potential projects in the pipeline
• Specializing in enterprise systems and business analytics
Future Direction of the IS Program

• Continue focusing in Business Analytics / Seeking IN-MaC + TAP opportunities
• Informatics certificate
• IS concentration area in CS degree
• MIS Program with Doermer School of Business
Catch-up & Break
10:30am – 10:45am
Open Discussion

Partnerships with local industry
Student employment
Internships & Co-op Exp
Senior capstone project
Student employment

- 82% of class of 2015 is employed, Cont. Edu, military, volunteering, or not seeking employment (Destinations Survey)

<table>
<thead>
<tr>
<th>College / Department</th>
<th>Cont. Edu on</th>
<th>Full-time</th>
<th>Part-time</th>
<th>Seek Emp</th>
<th>Other</th>
<th>Employed or Cont. Ed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETCS (n=191)</td>
<td>13%</td>
<td>62%</td>
<td>8%</td>
<td>14%</td>
<td>3%</td>
<td>83%</td>
</tr>
<tr>
<td>Comp/Elect. Info Tech (n=31)</td>
<td>13%</td>
<td>55%</td>
<td>19%</td>
<td>13%</td>
<td>0%</td>
<td>87%</td>
</tr>
<tr>
<td>Computer Science (n=33)</td>
<td>12%</td>
<td>73%</td>
<td>6%</td>
<td>9%</td>
<td>0%</td>
<td>91%</td>
</tr>
<tr>
<td>Engineering (n=29)</td>
<td>3%</td>
<td>79%</td>
<td>3%</td>
<td>14%</td>
<td>0%</td>
<td>86%</td>
</tr>
<tr>
<td>Mftg, Constr, Engr Tech (n=40)</td>
<td>8%</td>
<td>70%</td>
<td>6%</td>
<td>10%</td>
<td>6%</td>
<td>84%</td>
</tr>
</tbody>
</table>
Partnerships with Local Industry

• Expanding Guest Talks
  - Every fall: Project management, Design, Communication skills, Team play
  - Every Spring: SW development, Testing, Quality assessment

• Senior Capstone Project
  - Capstone projects over multiple years
  - Students retain ownership of IP created in their courses
  - Monetary sponsorship
  - Streamline from Co-op, Capstone prj, to Employment
Senior Capstone Courses

• Two-semester course sequence emphasis on
  ▪ The practice of software engineering skills
  ▪ For teamwork, project management, and oral and written communication
  ▪ Developing either application-oriented or research-oriented software project
  ▪ Students experience real work problems
  ▪ Experience potential employees or future employers
  ▪ Project sponsors can acquire a software solution needed or want to explore
# Senior Capstone Courses

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Till mid-April</td>
<td>Collecting proposals</td>
</tr>
<tr>
<td>Late April</td>
<td>Kick-off meeting</td>
</tr>
<tr>
<td>Till fall semester</td>
<td>Requirement analysis</td>
</tr>
<tr>
<td>Fall semester (CS460)</td>
<td>Complete SW design</td>
</tr>
<tr>
<td>Spring semester (CS465)</td>
<td>Complete SW construction</td>
</tr>
<tr>
<td>End of Spring semester</td>
<td>Presentation &amp; SW Delivery</td>
</tr>
</tbody>
</table>
Open Discussion

Direction of CS/IS Programs
Desired Skillsets
Needs of the Local Community
CS Department Directions & Goals

- To support IPFW 2014-2020 Strategic Plan
- CS Department will focus on
  1. Increase the retention rate and graduation rates
  2. Maintain high employment rate and the rate of graduates attending graduate programs
  3. Collaborative learning activities among students, faculty, and local industry and community partners
  4. Improve the quality and degree programs incorporating current trends in computing technology and information systems
  5. Improve quality, number of graduate students, and the quality of graduate program
# CS Department Focus Groups

<table>
<thead>
<tr>
<th>Concentration Area</th>
<th>Collaborating Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Science</strong> (Data analytics, Data mining, Visualization) / Informatics</td>
<td>Jin Soung Yoo, Adolfo Coronado, B Kim</td>
</tr>
<tr>
<td><strong>Internet of Things, Human Computer Interaction, AI</strong></td>
<td>David Liu, Zesheng Chen, Aleshia Hayes</td>
</tr>
<tr>
<td><strong>Cybersecurity</strong></td>
<td>Zesheng Chen, Matt Parker, David Liu, New faculty #1</td>
</tr>
<tr>
<td><strong>Software Engineering</strong></td>
<td>New faculty #2, Zesheng Chen</td>
</tr>
<tr>
<td><strong>Computer Programming</strong></td>
<td>George Petruska, Peter Ng, Matt Parker, Jacques Chansavang, B Kim</td>
</tr>
</tbody>
</table>
New Research Lab in ET143

• Reorganize ET143 as an interdisciplinary research lab
  ➢ Internet of Things (David Liu, Zesheng Chen)
  ➢ Human Computer Interaction (Aleshia Hayes)
    ➢ Look for collaboration with local industry
  ➢ Robotics

• The Information Analytics and Visualization Center
  ➢ Business Analytics, Data mining, Visualization (Jin Soung Yoo, Adolfo Coronado, Ben Aeschliman, B Kim)
New Program / Concentration

• Cybersecurity Consortium
  ➢ Zesheng Chen, Matt Parker, David Liu, New faculty #1

• Expanding Informatics with IU programs
  ➢ Health Informatics

• Enhancing IS program
  ➢ 5-year combined program for dual degrees: BS in IS and MBA
Open Discussion

Discussion Items from PAB
Lunch with CS faculty

Closed meeting for PAB recommendations
Thank You!