



Surprising Possibilities Imagined &
Realized through Information Technology

Information Technology Educational Program

November 23, 2011

Purdue University

Alka Harriger, SPIRIT PI

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SPIRIT Information Technology Educational Program

SPIRIT Day Program At A Glance					
8:30 am – 8:55 am	Registration & breakfast in WTHR 104				
9:00 am – 9:30 am	Computing Careers Overview in WTHR 104				
9:35 am – 10:35 am	A: Computing in Law Enforcement - Cyber forensics (purple) KNOY 228	B: Creating Animations with Scratch (yellow) SC 277	C: Computing in Health Sciences (red) SC 283	D: Supporting Human Interaction with Computing (green) SC 289	E: Computing in Manufacturing (blue) KNOY 258
10:45 am – 11:45 am	E: Computing in Manufacturing (blue) KNOY 258	A: Computing in Law Enforcement - Cyber forensics (purple) KNOY 228	B: Creating Animations with Scratch (yellow) SC 277	C: Computing in Health Sciences (red) SC 283	D: Supporting Human Interaction with Computing (green) SC 289
11:50 am – 12:30 pm	LUNCH in WTHR 320				
12:35 pm – 1:35 pm	D: Supporting Human Interaction with Computing (green) SC 289	E: Computing in Manufacturing (blue) KNOY 258	A: Computing in Law Enforcement - Cyber forensics (purple) KNOY 228	B: Creating Animations with Scratch (yellow) SC 277	C: Computing in Health Sciences (red) SC 283
1:45 pm – 2:45 pm	C: Computing in Health Sciences (red) SC 283	D: Supporting Human Interaction with Computing (green) SC 289	E: Computing in Manufacturing (blue) KNOY 258	A: Computing in Law Enforcement - Cyber forensics (purple) KNOY 228	B: Creating Animations with Scratch (yellow) SC 277
2:55 pm – 3:55 pm	B: Creating Animations with Scratch (yellow) SC 277	C: Computing in Health Sciences (red) SC 283	D: Supporting Human Interaction with Computing (green) SC 289	E: Computing in Manufacturing (blue) KNOY 258	A: Computing in Law Enforcement - Cyber forensics (purple) KNOY 228
4:00 pm – 4:30 pm	OPTIONAL – Complete session assessments in SC 277, 283, or 289 <i>(Alternatively, assessments may be completed online by 11/28/11, noon, to qualify to receive the stipend)</i>				

This material is based upon work supported by the National Science Foundation under Grant No. DRL-0737679

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

SPIRIT Session Descriptions

Time	Title, Presenter(s) & Description
9:00 am – 9:30 am	<p style="text-align: center;">Computing Careers Overview Alka Harriger</p> <p>This session will describe the many types of career opportunities that are available to people who have computing expertise through a college degree in Information Technology. Placement statistics about graduates of the Computer and Information Technology program at Purdue will be shared.</p>
9:35 am – 10:35 am 10:45 am – 11:45 am 12:35 pm – 1:35 pm 1:45 pm – 2:45 pm 2:55 pm – 3:55 pm	<p style="text-align: center;">Introduction to Cyber Forensics Rachel Sitarz and Tejashree Datar</p> <p>This introductory session will shed light on the area of Cyber Forensics. The session is hands on, where the students will get the opportunity to utilize tools that law enforcement officers, and Cyber Forensic professionals all use.</p>
9:35 am – 10:35 am 10:45 am – 11:45 am 12:35 pm – 1:35 pm 1:45 pm – 2:45 pm 2:55 pm – 3:55 pm	<p style="text-align: center;">Creating Animations in Scratch Jarad Shannon</p> <p>IT revolves around the idea of a user interacting with technology. In this session participants will create an animation in Scratch that will allow the user to interact with it. This animation will illustrate some aspects of programming and its possibilities. The participants will be able to see firsthand how to use Scratch to create other animations to communicate a message to your audience in an engaging way.</p>



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SPIRIT Session Descriptions

Time	Title, Presenter(s) & Description
9:35 am – 10:35 am 10:45 am – 11:45 am 12:35 pm – 1:35 pm 1:45 pm – 2:45 pm 2:55 pm – 3:55 pm	<div style="display: flex; justify-content: space-between;"> <div>Computing in Health Sciences</div> <div>Chelsea Berryman</div> </div> <p>Healthcare affects everyone sometime in their life, whether a daily checkup or visiting a family member in the hospital. This session’s main goal is to help students better understand the role of information technology in the healthcare field and how IT can positively impact society. We will discover information about new diseases and facts with the help of technology. We will use a new presentation technology, Prezi, to share what we learn with others in an engaging fashion.</p>
9:35 am – 10:35 am 10:45 am – 11:45 am 12:35 pm – 1:35 pm 1:45 pm – 2:45 pm 2:55 pm – 3:55 pm	<div style="display: flex; justify-content: space-between;"> <div>Supporting Human Interaction with Computing</div> <div>Suruchi Shah</div> </div> <p>Social Networking has become huge in recent years. Whether for class or work, everyone needs to communicate in order to work together and come up with good solutions. This session will show students a way to create their own social networking website to help them stay in touch and connect with others in their community or organization to stay informed. The participants can either continue to use the same website, or use their understanding from the session to create other social networking sites!</p>
9:35 am – 10:35 am 10:45 am – 11:45 am 12:35 pm – 1:35 pm 1:45 pm – 2:45 pm 2:55 pm – 3:55 pm	<div style="display: flex; justify-content: space-between;"> <div>Computing in Manufacturing</div> <div>Brad Harriger</div> </div> <p>Automated manufacturing uses information technology in many ways. This session will introduce you to a few examples.</p>



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SPIRIT Program Speakers

Presenter	Biography
<p>Chelsea Berryman</p> 	<p>Computing in Health Sciences</p> <p>chelsea.berryman@gmail.com or cberryma@purdue.edu</p> <p>After I have graduated from Purdue, I will have five internships in the Healthcare field as well as several years of Systems Analysis and Database design on my belt to prepare me for a consulting position in the Healthcare field that would allow me to make an impact in the everyday lives of my neighbors and family.</p>
<p>Tejashree Datar</p> 	<p>Introduction to Cyber Forensics</p> <p>tdatar@purdue.edu</p> <p>My entire background has been technical all the time. I received my undergraduate degree in Electronics and Telecommunication from University of Pune in India. I got my Master's Degree from Oklahoma State University in Telecommunications Management. During my Master's, I took a course in Digital Forensics and that was how I got interested in the field of Cyber Forensics. Currently I am pursuing my PhD in Cyber Forensics.</p>

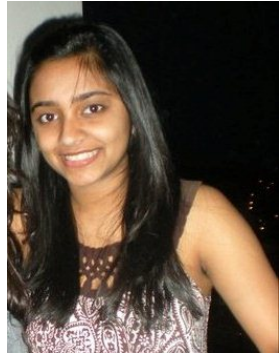

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SPIRIT Program Speakers

Presenter	Biography
<p>Alka Harriger</p> 	<p>Computing Careers Overview</p> <p>harrigea@purdue.edu</p> <p>Alka Harriger is currently a Professor of CIT and Associate Department Head, and was recently named a Dean Fellow for 2012. Professor Harriger's current interests include reducing the IT gender gap, web application development, and service learning. Since January 2008, she has been leading the NSF-ITEST SPIRIT project that seeks to rekindle enthusiasm for information technology disciplines as a career choice among high school students, especially young women.</p>
<p>Brad Harriger</p> 	<p>Computing in Manufacturing</p> <p>bcharrig@purdue.edu</p> <p>Brad Harriger's primary teaching and scholarship interest has been in the area of Computer-Integrated Manufacturing (CIM). His contributions to the nationally-recognized MFET (previously known as CIMT) program include leadership in the development of a true CIM facility, co-authorship and implementation of the highly successful curriculum, and promotion of the program and its graduates to industry and other academic institutions. Since the inception of the CIMT program in 1984, he has been involved in every facet from teaching to administration. Prof. Harriger has presented several papers at national and international conferences.</p>


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SPIRIT Program Speakers

Presenter	Biography
<p>Suruchi Shah</p> 	<p>Supporting Human Interaction with Computing: Social Networking</p> <p>suruchi.shah13@gmail.com</p> <p>(219)-789-2123</p> <p>I am a junior in Computer and Information Technology with a focus in the Information Systems side. I have had some experience working in the IT industry via internships and on-campus jobs which have greatly helped me transform my technical knowledge from classrooms into the real-world problem implementations. I hope to get a job in the future that lets me continue to do the same.</p>
<p>Jarad Shannon</p> 	<p>Creating Animations with Scratch</p> <p>shannonj@purdue.edu</p> <p>I began at Purdue in Computer Science in 2002. After this, I worked for several years in IT as a Systems Administrator. Returning to Purdue, I am now finishing a CIT degree. After college, I will be developing software.</p>





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Presenter	Biography
<p data-bbox="184 313 378 342">Rachel Sitarz</p> 	<p data-bbox="485 321 930 350">Introduction to Cyber Forensics</p> <p data-bbox="485 418 743 448">rsitarz@purdue.edu</p> <p data-bbox="485 513 1892 734">I received Bachelor's degree in Law and Society, minoring in Forensics and Psychology at Purdue University. I went to Technology for my graduate studies, where I began studying Cyber Forensics. I have learned that there is a multitude of careers in this field. During my time as a graduate student, I have been given the ability to utilize my knowledge with the Indiana State Police, where I work as a Criminal Intelligence Analyst. This field has become a passion of mine, as I have realized how much of a difference I can make.</p>

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SPIRIT Day Camp Counselors

Counselor	Background
	<p>Raghava Budhiraju</p> <p>Mobile: 952-567-3423 E-mail: rbudhira@purdue.edu</p> <p>I have worked as an Analyst Programmer in Accenture India for 4 years prior to Purdue. I worked as a PL/SQL, Unix Developer. My career goal is to enhance my knowledge on databases and work towards specializing in Data Management.</p>
	<p>Victor Diatlovich</p> <p>vdiatlov@purdue.edu</p> <p>Since I was 13 I have always loved technology. It is an ever changing world that is fun to keep up with. In the future I hope to work for a computer company such as Google or stay in the Indy Car Series as a computer tech, as I am currently.</p>
	<p>Logan Harriger</p> <p>I am a senior at IU studying philosophy, math, and neuroscience. I plan to pursue graduate study in physics or computer science. I believe information technology is a vital component of modern civilization and affects man in countless ways—even in a fundamental sense of what it means to know and think.</p>
	<p>Emiel Kendrick</p> <p>I am a senior at Indiana University majoring in Sport-Communication Broadcast and a minor in Telecommunications.</p>

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SPIRIT Day Camp Counselors



Aditi Magikar

amagikar@purdue.edu

I've done my undergraduate degree in Computer Science. I'm interested in databases & database applications.



Marquita Moreland

mmorelan@purdue.edu

I am a senior in Computer & Information Technology (Networking Concentration) and I have a minor in Forensic Science. My anticipated graduation date is 12/2012. I plan to attend graduate school for Computer Forensics. My goal is to work for the FBI analyzing different types of systems finding evidence to support crimes in Washington, DC.



Jimmy Zumbrun

jzumbrun@purdue.edu

I am a graduating senior in CNIT in the IS concentration. My focus is on software development and did an internship this summer with a consulting company in downtown Chicago where I coded web pages and iOS applications. After graduation, I will be working for Exxon Mobil in Houston, Texas.

Activity/Presentation Evaluation Form Notes Page

Make notes in the space provided, so you can complete the daily assessments at the end of each day.

<p>Date & Time: _____</p> <p>Presenter: _____</p> <p>Title: _____</p> <p><i>Please reflect on the activity you just completed or presentation you just watched. Based on this experience, please select from the following scale: Excellent, Very Good, Good, Fair, or Poor (E, VG, G, F, P)</i></p> <p>Speaker's knowledge of IT & material presented: _____</p> <p>Clarity of presentation and presentation materials: _____</p> <p>Speaker's awareness of time & flow of the material: _____</p> <p>Overall evaluation of activity/presentation: _____</p> <p>What aspects of the activity/presentation have you found most helpful in aiding your understanding of Information Technology career opportunities and possibilities?</p> <p>What aspects of the activity/presentation did you find were not helpful in aiding your understanding of Information Technology career opportunities and possibilities?</p> <p>Did what you do/hear change your mind about learning more about computing? If so, please explain.</p> <p>Additional Comments:</p>	<p>Date & Time: _____</p> <p>Presenter: _____</p> <p>Title: _____</p> <p><i>Please reflect on the activity you just completed or presentation you just watched. Based on this experience, please select from the following scale: Excellent, Very Good, Good, Fair, or Poor (E, VG, G, F, P)</i></p> <p>Speaker's knowledge of IT & material presented: _____</p> <p>Clarity of presentation and presentation materials: _____</p> <p>Speaker's awareness of time & flow of the material: _____</p> <p>Overall evaluation of activity/presentation: _____</p> <p>What aspects of the activity/presentation have you found most helpful in aiding your understanding of Information Technology career opportunities and possibilities?</p> <p>What aspects of the activity/presentation did you find were not helpful in aiding your understanding of Information Technology career opportunities and possibilities?</p> <p>Did what you do/hear change your mind about learning more about computing? If so, please explain.</p> <p>Additional Comments:</p>
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This program would not have been possible without the generosity of our partners and guest speakers

SPIRIT

Partners



COLLEGE OF TECHNOLOGY



The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." With an annual budget of about \$5.92 billion, we are the funding source for approximately 20 percent of all federally supported basic research conducted by America's colleges and universities. In many fields such as mathematics, computer science and the social sciences, NSF is the major source of federal backing.

SPIRIT was made possible through the generous funding provided by NSF's ITEST (Information Technology Experiences for Students and Teachers) program.



COLLEGE OF TECHNOLOGY

Purdue's College of Technology began with a strong vision to provide excellent application-oriented degree programs as a key component of Purdue's land grant mission. Today, the school's faculty is comprised of exemplary teachers, accomplished scholars, and professional leaders. Strong industrial ties and close interdisciplinary partnerships between the school's departments have also built a strong foundation for the school's work today while shaping the vision for tomorrow.

Purdue's College of Technology (COT) supports SPIRIT through contribution of activities led by COT faculty and students. Additional support has been provided by the college's marketing staff who created the design for the SPIRIT brand.

SPIRIT Contact: Alka Harriger, Professor and Associate Department Head of CIT
