

Shawnee 7.0



WIRED was a proud sponsor of Capturing Imagination, the Seventh Annual Conference for Interactive Digital Technology at Shawnee State University. 274 participants including students, educators, and industry leaders attended the conference held on campus October 30, 2009.

ulty from partner universities, including Shawnee State University, Ohio University, Kent State Tuscarawas, and the University of Rio Grande. Session topics included entertainment industry, serious games and simulations, creating virtual worlds, and Second Life.

Sibley Verbeck the founder and CEO of Electric Sheep Company provided the keynote address. Verbeck, has received multiple



The 7.0 Conference was the first to feature break-out sessions led by university students, and also the first to feature a demonstration of Shawnee State University's new Motion Capture Studio. For the first time, Shawnee State University's Office of Career Services offered

awards and recognition as one of the country's top young technology executives and is also co-founder of the Virtual Worlds Roadmap. He addressed the conference with an inspiring story on what motivated him to create his company, and then told the audience what trends he has seen in the virtual world industry.

an IDT Job and Internship Fair during the conference. All college and university students attending the conference were invited to meet with participating employers to discuss current and future job openings.

The conference attendance included high school and university students and their instructors from throughout Ohio. The event has attracted an impressive succession of topnotch video game and serious game industry leaders as keynote presenters including Jason Conway from Electronic Arts, Jerry Hengan with Virtual Heroes, and Eric Johnston with Lucas Arts. It has also become a showcase of successful small businesses, and faculty and student IDT research projects. Concurrent sessions feature presentations by IDT business owners and fac-

The Ohio Valley Information Technology Alliance WIRED* Project provided not only provided funding for the conference but it also awarded scholarships to students who competed in an IDT projects competition. The OU Voinovich School for Leadership and Public Affairs joined the partnership this year with its Tech Growth Ohio program - an initiative which provides business support and investment to IDT companies and entrepreneurs.

The Shawnee Conference for Interactive Digital Technology establishes Shawnee State University as the regional leader in the development of a high tech education and business climate.

HIGH SCHOOL WINNERS

1st place - Trista Dever – Scioto County CTC
 Sean Blevins – Scioto County CTC
 Zane Conley – Scioto County CTC
 Thomas Jones – Scioto County CTC

2nd place –Brandon Fouts – Indian Valley
 Seth Moore – Indian Valley
 Kim Napier – Claymont
 Cory Schwendiman – Claymont

COLLEGE WINNERS

1st place – Daniel Morrison – SSU
 Sam Bushman – SSU
 William Maynard – SSU
 Darrell Cardwell – SSU

2nd place –Roy Dearstine – Washington State CC
 Christian Ulman – Washington State CC
 Marshall Havens – Washington State CC
 Seth Ward – Washington State CC

3rd place – Brandon Brown - SSU

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PRIZE INFORMATION

1st place received a 32GB iPod Touch, 2nd a Wacom Bamboo Pen and Touch tablet, and 3rd a 3Dconnexion SpaceNavigator PE 3D mouse. There was not a 3rd place for High School participants.

Shawnee 7.0 Sessions Offered

Cyber Ethics Janice Johnson, Present and potential ethical issues related to IT, IDT, and Virtual Worlds. Issues related to privacy, identity, human/technology interface, and others; and the effect the technology has and will have on our lives and society.

Design Process & Implementation Nathaniel Berger, Company: Brown Bag Games (BBG) *Design Process & Implementation* is a discussion [with others] regarding personal experiences on digital design and implementation, encompassing topics including: The Importance of Listening, Integrating Feedback, Production Practices, Results & Outcomes.

Game Design from a Student-Team Perspective Sam Bushman What does it take to be a Game Design student at Shawnee State? In this session, a team of senior students will give you a first-hand look at how game development works by discussing their experiences with their capstone project. Several members of the project team will be available during the presentation to give their unique perspectives on the development of a large scale game development project. Have your questions ready to learn about their design decisions, team management techniques and game development in general.

Game Programming using Python (an Introduction) Jason Witherell Python is an open-source programming language which is seeing increasing use in the games industry as a general-purpose programming language (used by YouTube, Google, and NASA, to name a few), a scripting language, a "glue" language, and as a tool in other software packages (including Maya, arcGIS, and Zope). In this session, we'll explore how Python (and the PyGame module) can be used to easily create 2D games. We'll make an actual game in less than 50 minutes! No programming

experience is required.

Hands-on 3D Educational Gaming Workshop Andrew Goodnite Dr. Chang Liu Bill Young Steve Carroll During this hands-on session, participants will learn about and play several computer based 3D educational modules like, Wave Hero and Stunt Park. In Stunt Park, participants will get to drive a car through a bunch of different stunt maneuvers and answer science questions as they proceed. Wave Hero helps students to visualize the propagation of energy through a medium in the form of a wave. In this module, participants get to play a guitar and see the sound waves move through the air. Other science modules will be demonstrated as time allows. All modules are available for free on the STEAM website at: <http://steam.cs.ohiou.edu> under the software top bar menu item. As this session is a hands-on interactive session, attendance will be limited to the first 20 people to arrive.

Show me the Money! Financing Your IDT Startup Mark Butterworth

Sources of funding for an IDT startup

What each source of funding is looking for

How to locate funding sources

Teaching Network Security with Second Life Travis Turner Virtual multimedia worlds such as Second Life allow students to gain a hands-on experience of network management and security. Discussion of the design, development, and application of a router simulation developed for the classroom. Exploration of how virtual world applications can be used in classrooms as well as for training and ways to develop training/teaching materials for educators and businessmen that would be financially inaccessible by other meas-

ures.

Tight Controls and Clear Feedback Jason Conaway The human-computer interface is a crucial element in video games and interactive simulations. Sloppy controls or ambiguous responses will ruin an otherwise good design. This session will cover techniques for improving system response time, making the controls feel intuitive and precise, and how to present good feedback to the players.

Virtual Worlds Applications for Business & Education Janice Johnson How Virtual Worlds such as Second Life are being used as platforms to create applications for commerce and teaching. What is already being done, what is being planned, and what is possible for the future. How any size business can benefit from the technology and how it can be used in the class room.

WebXams Interactive Media Study Guide Mike Beaver, Ph.D., Professor, University of Rio Grande Mike Kimble, College Tech Prep Instructor, River Valley High School Presentation on a Moodle based on-line Interactive Media Study Guide designed for College Tech Prep Students preparing for Interactive Media WebXams assessments.

WIRED Update/Discussion (Invited Guests Only) Bill Sams Tom Stead Bill Sams, along with Tom Stead, will provide an update on the WIRED program and a discussion on the place for virtual worlds and social networks in economic development of the Appalachian Ohio region.

Students Take First Look At Shawnee State University Motion Capture Lab

On October 30th, 2009, as part of the activities at the Shawnee 7.0 Conference, Shawnee State University demonstrated their new Motion Capture (MOCAP) Lab. The Motion Capture Lab is a component of the Immersive Technology and Arts Center (ITAC) being established in the university's Advanced Technology Center. The MOCAP lab currently comprises a PhaseSpace 32-camera system, supporting computers, and software housed in a specially configured room with walls painted a non-photo green to provide a neutral image background. The lab will be used by the digital simulation and the gaming arts degree programs as an instructional lab enabling SSU students to work with a commercial state-of-the-art motion capture system that is used in interactive media and engineering applications.

The lab functions using actors who wear a suit equipped with active LED markers, and who then engage in body movement. As the actors move, their movements are captured as a function of the movement and position of their body markers and imported into a computer equipped with motion capture software and then inserted into animation software program to animate an avatar or other figure. In addition to human subjects, the system can also be applied to the capture of motion of mechanical and robotic devices. Other applications of the system include areas such as occupational therapy, physical therapy, nursing, athletic training, and vocational training, in short any area where the study of body movement is involved. Additional work is underway on the facility to provide for computers and for video editing and sound synthesis and capture.

The university is planning to make the facility available outside the university to firms who are looking to do motion

capture. The vision is that the facility that would encourage high technology enterprises to come to the area, as well as encourage start-up companies to promote economic development in southeastern Ohio. To move in this direction, the MOCAP Lab has been proposed as a component of the Center of Excellence presented by Shawnee State to the Ohio Board of Regents. Through this concept, the digital programs the university offers can be expanded to promote a state-wide and national presence of the simulation technology and gaming arts programs, support regional economic development, and estab-

lish south-central Ohio as a significant player in the information and digital-driven national and global economy of the 21st Century.

In addition to being supported by the university, MOCAP and ITAC has been made possible by donations from the community to Shawnee State through their development foundation, and state and federal funds. For additional information regarding the facility, please contact either Carl Hilgarth, Professor and Department Chair, Engineering Technologies, email: chilgarth@shawnee.edu, voice: 740.351.3595 or Greg Lyons, Assistant Professor and Department Chair, Fine, Digital & Performing Arts, E-mail: glyons@shawnee.edu, voice: 740.351.3004.



SSU Cyber Center Goals

The goal of the Shawnee State University WIRED OVITA Regional Cyber Center (SSUCC) is to provide technical guidance, operational support, professional development, and innovative ideas to WIRED OVITA Cyber Clubs in the region as well as the OVITA WIRED program in general.

In addition, SSUCC works with the Regional Collaboratory to obtain additional financial support for this program. SSUCC strives to be the innovative mind and infrastructural backbone behind the OVITA WIRED program.

In particular, SSUCC has the following objectives.

- Development of learning aids and training tools in online virtual environments;
- Professional development and technical support for Cyber Club personnel;
- Proposal development in areas related to the OVITA WIRED workforce development missions;
- Recruiting and selection of new Cyber Clubs in the region;
- Assessment of existing Cyber Clubs; (Constructive feedback will be provided to the Cyber Clubs.)
- Participation and assistance in promotion or dissemination activities, including presenting and exhibiting at conferences;
- Collaboration with the OVITA WIRED Collaboratory (Regional Coordination Center) and the two other Cyber Centers in neighboring regions.

Participation in supplemental programs such as those related the Motion Capture Studio operation, and the IDT Computer Labs.

The Shawnee Cyber Center will assist students of the region to gain the knowledge and skills necessary to succeed in the changing needs of arts, business, industry, education, and society. It assists them in learning about Interactive Digital Technology and

how it affects their lives: in the workplace, at schools and universities, and in the general public. Club members will learn how to utilize the technology to enable them to be better workers and better members of society. They will have the opportunity to interact with educators, engineers, technicians, and business people; gaining the tools to make them successful in whatever employment or endeavor they pursue. The Cyber Center is a hub for information, helping educators and business personnel to find ways to apply new technology and ideas to better perform within their institutions and organizations. The Cyber Center allow Southern Ohio residents to employ technology to be successful in their own region, nationally, and globally.

The region SSUCC serves is identified as Ohio Economic Development Region 7 with the addition of Clermont County. As defined that includes Adams, Adams, Brown, Clermont, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto, Clermont, and Vinton Counties of Ohio.

The target population is:

High School Students above age 16 with a possible interests in IDT related studies

College students already in an IDT program or students interested in possible IDT career fields.

Adults desiring a new career in IDT field or career update in the IDT Field

Teachers wanting to learn how to use Integrated Digital Technology in the classroom to better improve the education process

Businesses that would like to use IDT, Virtual worlds, to better improve their business or begin business operations in a virtual world



B2B Champions Wanted



Hocking College has started an exciting new program called Southeastern Ohio B2B, <http://www.seob2b.org/>. The basic idea is to take the eBusiness needs of local small businesses and organizations and pair them with qualified youth in the community backed by a professional support system to deliver the services needed to make our local businesses competitive. Whether this is getting involved in a social network, improving a web page or using powerful free net based productivity tools it is an approach that has the potential to be very successful in creating jobs for digitally savvy local individuals while meeting the needs of local businesses.

If you have a passion and interest in becoming a champion and learning more about how this system could be applied in your Cyber Club then please contact Bill Sams at samsw@ohio.edu

Bill's Cool Corner



At my age a new brain is a welcome possibility and **Personal Brain**, <http://www.thebrain.com>, (check out lesson 4) offers considerable help in organizing your thoughts. This is a next generation mind mapping software that allows extensive non-hierarchical relationships. The start up level is a free download. The fact that it is easy to attach documents, videos and pod casts to each thought makes it a tremendous visualization system to organize a course or a project.

2. **eTech Ohio's iTunes U** is now at over 2,200 learning objects ranging from Ohio bird calls to English as a Second Language. At over one million downloads since it launched in February it is the most successful state site on Apple's iTunes U. It is free.

3. For folks looking for work or workers check out **Ohio Means Jobs** <https://ohiomeansjobs.com/omj/> This site was developed by Mark Birnbrich, one of our early WIRED colleagues at the state level. The site is very easy to use and provides a wealth of information on jobs and salary levels. It is free.

4. Tired of thinking in 2D

and want to expand to 3D? **Google Sketch Up** is a great 3D drawing tool that is a free download.

<http://sketchup.google.com/>

5. Want to do games for the iPhone or web? The **Unity Game Engine** is now a free download.

<http://unity3d.com/>

6. **Shrendipity:**

<http://www.shrendipity.com/> "Shrendipity is a new

paradigm for software development, empowering consumers, enterprises, and educators to create interactive applications in a live, collaborative environment. Technical community members share content that is pieced together by less technical users. In the same way the spreadsheet enabled individuals to perform their own financial analysis; Shrendipity empowers non-programmers to build their own interactive content that goes beyond text, pictures, or videos." They provides a free download. If you want to play around with making your own game this might be the place to start.

7. Aviary:

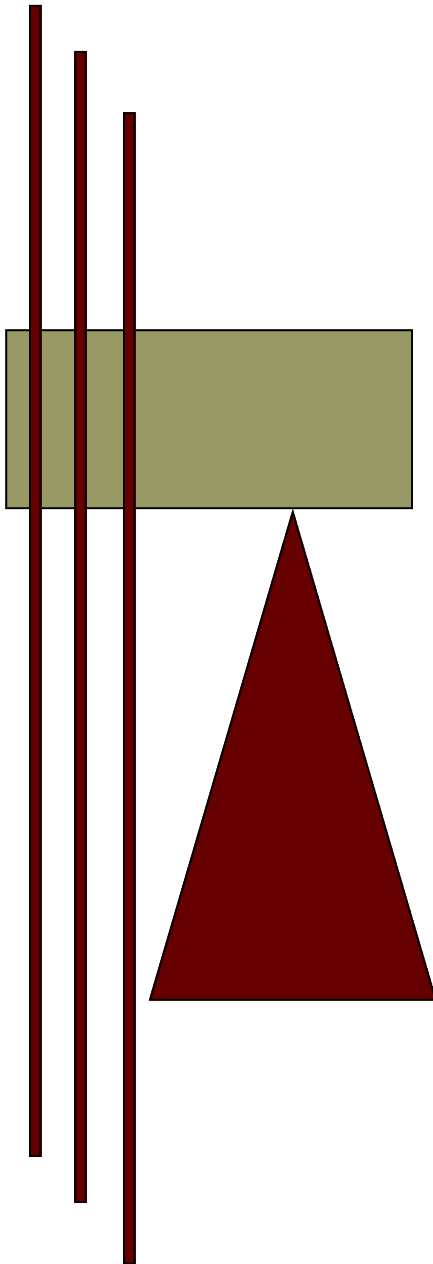
<http://aviary.com/> here is an animation tool that provides a nice video tutorial support to get started. It is free.

8. YouCube:

<http://www.universalsoffice.com/youcube/> this is a fun little place to post pictures, documents or videos on a six-sided cube much like people have on their desks for photos. However with this one it is on your computer screen and if you have posted videos as you turn the cube the videos begin to play. It is free.

9. Photosynth:

<http://photosynth.net/> for someone who wants to take a collection of pictures of a single place or thing and turn them into a 3D representation then this is tool. It is free and web hosted. It basically stitches photos together in a 3D form so that you can walk around and see the object from every side. It is free.



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