Continuously Running – All exhibits are located in the Paul G. Allen Center (CSE) unless noted otherwise.

**STUDENT PROJECT SHOWCASE – Gates Commons Conference Room, 6th floor**
You could be working on exciting capstone design projects like these in four years. These videos feature our undergraduate majors showcasing their team projects in areas such as animation, robotics, and embedded systems.

**ADA BYRON LOVELACE: TO DREAM TOMORROW – CSE 403**
Lovelace lived in the 1800s, but she was some hundred years ahead of her time in recognizing the vast potential of computing. Through diaries and letters, this movie reveals her visionary collaboration with leading scientists and mathematicians of her day.

**COMPUTERIZED BIRDSONG EXHIBIT (CSE 466: EMBEDDED SYSTEMS COURSE PROJECT, AUTUMN 2003) – Atrium**
Tiny computers that communicate via radio will be chirping birdsongs in our building. With the passing of time, these "birds" imitate each other, and the flock gradually changes to new songs.

**COMPUTER SCIENCE IN THE REAL WORLD – Poster Presentations outside Gates Commons, 6th floor**
Think computer science is just about programming? Think again. These posters feature recent graduates from our program who are out in the real world applying their computer science expertise in a wide variety of careers, everything from computational biology to law.

**HEROINES OF COMPUTING: Women in Computing from the 1800’s to the Present Day – Poster Presentation**
What do the first computer programmer (born in 1815), the author of the first computer science textbook, the inventor of the compiler, and the inventor of computerized phone switching have in common? They were all women. Will you—or someone you know—be the next heroine of computing?

**Scheduled Events**

**9:00-1:00 TABLETS IN THE CLASSROOM: Teaching and Learning with Pen-Based Computers and Wireless Networking – CSE 305**
In the classroom of the future, we will all have clipboard-sized computers that we can write on with electronic pens, and computers will help teachers recognize when their students are confused or falling behind in class. CSE Undergraduates Crystal Hoyer and Jonathan Su will give you a glimpse of this classroom of the future today with this hands-on demonstration of Tablet PCs and wireless networking.

**9:00-11:00 COMPUTERIZED MICROBIOLOGY LAB ASSISTANT – CSE 405**
UW computer scientists have teamed up with microbiologists to develop the lab bench of the future. CSE graduate student, Jiwon Kim, will demonstrate a computer system that assists microbiologists with experiment procedure and automatically records the experiment steps by watching the lab scientist at work. In addition, CSE undergraduate, Eliana Hechter will be on hand to talk about how her research project ties computer science and biology too.

**9:00-1:00 HOW IT ALL WORKS: Puzzles and Games – 3rd-5th Floor Breakout Areas, near stairwell**
How do computers store numbers and text? How do computers and fax machines transmit images? What are all the parts inside a computer, and what do they do? The answers are surprisingly simple, and even fun, with these puzzles, activities, and demonstrations. This activity is appropriate for early elementary students and above.

**10:00-12:00 TECHNOLOGIES FOR ASSISTING ALZHEIMER PATIENTS - 2nd Floor Breakout Area, near stairwell**
The Activity Compass is a handheld computing aid for Alzheimer’s sufferers. CSE graduates Lin Liao & Shiaokai Wang will show how this technology assists patients by learning their travel patterns and providing directions and reminders.

**9:30-12:30 BEYOND POINT & CLICK: Making Computing Accessible for the Sight-Impaired – CSE 303**
See the voice synthesis software, Braille notetaking devices, and Braille displays ("electronic Braille paper") that help sight-impaired people utilize computers. This demo will include a glimpse of the latest UW research on Braille publication of textbook diagrams and graphs.
9:30-11:30  MODELING HUMAN FACIAL EXPRESSIONS IN 3-D – CSE 203
UW’s cutting-edge computer animation software starts with a short video clip of a person making faces and produces a realistic 3-D model that you can manipulate to show a wide range of emotions, even with new facial expressions that weren't made in the original video clip! See video samples of the results and meet CSE graduate students, Li Zhang and Noah Snively, who are working on this project.

10:00-11:00  ONLINE LEARNING ENVIRONMENTS LAB – Sieg Hall, ROOM 322
1:30-3:00  The OLE lab supports research in the design and testing of web-based educational software systems. See CSE undergraduate students demonstrate the INFACT online learning system, a collaborative drawing game, and visual messaging.

10:30-12:00  INTRO TO INTRO PROGRAMMING: Projects and Experiences – CSE 022 (basement)
Undergraduates from our introductory programming courses (CSE 142 and 143) will demonstrate their course projects and show how you can learn to do in just a few weeks of course instruction. In addition to seeing a variety of colorful projects, you’ll be able to talk to the undergraduates and learn first-hand what it’s like to study CSE at UW.

10:30-12:00  RECORDING BODY MOVEMENT: 3-D Motion Capture – CSE 014 (basement)
See how computers can precisely track and record how humans and animals move using multiple cameras and special software. Motion capture helps physical therapists diagnose and treat problems with walking and balance. “Mo-cap” is also the secret behind realistic movements by computer-generated characters in your favorite movies: Titanic, Star Wars, Shrek, and The Lord of the Rings (Gollum). Try having your movements recorded in this interactive demo with graduate students Mira Dontcheva and Karen Liu!

11:00-12:00  PARLEY PROGRAMMING LANGUAGE – CSE 674
Sure, you might have heard of Java and C++, but they're not nearly as fun as a programming language inspired by Pirates of the Caribbean. With Parley, designed by undergrads Young-Mi Shin, Mary Dang, and Kira Lehtomaki, the programmer uses "pirate-speak" to issue instructions to the computer, complete with Yo-hos! and Ahoys! Check out their language, if ye dare!

11:30-1:30  STUDENT CIRCUITS: Digital Systems Design Projects Showcase – CSE 003 (basement)
Computer science isn’t just about programming, it’s about creating new computing devices, too! Stop by to see a sampling of digital devices our students have produced in recent project courses.

- **The Tilt-o-meter** -- a stepper motor project from Bruce Hemingway's CSE 466 class. As you tilt the motor, the control software attempts to keep the sensor level.

- **Video Drawing** - Carl Ebeling's 567 students built video effects devices to run in real time. One student produced a charcoal-renderer which operates in real time to convert video to a picture with drawing characteristics.

- **Physical Modeling Synthesis** - Carl Ebeling's 467 class implemented a digital audio synthesis technique which calculates a physical model of a guitar string. You can trigger sounds in real time.

- **Reach Out & Transfer Some Data** – What if a vending machine could tell you whether you're allergic to the snack you point at before you buy it? What if you could copy and paste data between two devices without using a floppy disk, memory device, or network cable? CSE graduate student, Kurt Partridge, will show you the technology he's developing to make this and much more possible.

12:30-1:30  MOBILE ROBOTICS – CSE 491
See Professor Dieter Fox’s team of soccer playing Sony AIBO dogs in action! CSE undergraduates Matt Mohebbi and Griff Hazen will demo a 3 versus 3 soccer match with fully autonomous robots. During the game, they will describe the underlying software system that accomplishes tasks such as localization, ball tracking and behavior.

12:30-2:30  ANIMATION LAB TOURS – Sieg Hall, rooms 329 & 332
Undergraduates in the year-long animation course sequence will open up their lab to visitors. See the work in progress on this year's animation short. Students will show the storyreel and give details on their current project.