



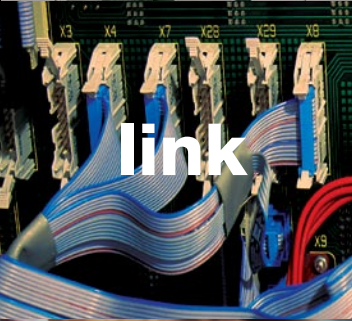
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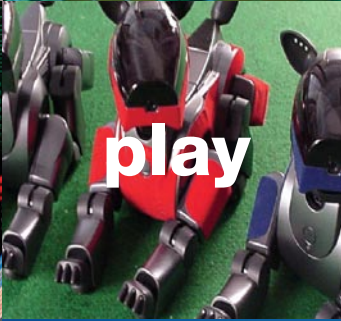
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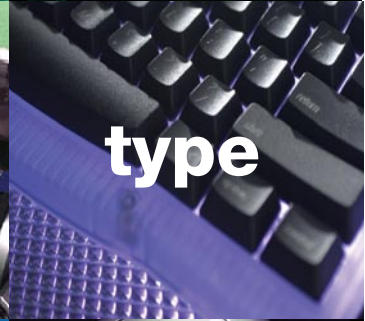
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**link**



**play**



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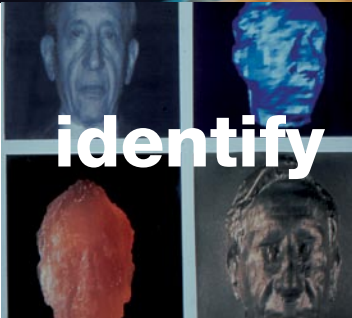
**move**



**explore**



**learn**



**identify**



**spin**



**C S**

**attend**

**5 0**



**CS50 Anniversary Celebration**  
April 19-22, 2006

**CarnegieMellon**

FIFTY YEARS OF COMPUTER SCIENCE

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## ***Welcome to the CS50 Anniversary Celebration!***

Dear CS50 Guests --

I would like to welcome you to the Carnegie Mellon campus to help us celebrate 50 years of innovation in computer science. Preparing for this event has given me the chance to look over and learn about the research and education conducted here since the pioneering days of Newell, Simon, and Perlis. I have been very impressed by the depth and vision of their work, and I am very thankful that they helped create the field and the organization that has become my career. I look forward to learning more about our history and where it has led, and to get some glimpse of what lies ahead.

I think you'll find there is plenty, indeed too much, for you to do over the next few days. I hope you are able to settle on the activities that most suit your interests. Of course, one big part of an event such as this is the chance to reconnect with old friends and to meet new ones. We've provided many opportunities for informal interchanges. I hope you find CS50 intellectually engaging and enjoyable!

Sincerely,

A handwritten signature in black ink that reads "Randy Bryant". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Randal E. Bryant, Dean  
School of Computer Science

# **GENERAL INFORMATION**

## **REGISTRATION**

### **CS50 Registration and Information Desk**

Wean Commons, University Center

**Wednesday, April 19:** Noon - 5 p.m.

**Thursday, April 20:** 7:30 a.m. - 7 p.m.

**Friday, April 21:** 7:30 a.m. - 6:30 p.m.

**Saturday, April 22:** 8 a.m. - Noon

## **SHUTTLES**

The CS50 shuttle will run every hour at the top of the hour, (e.g. 10 a.m., 11 a.m., 12 p.m.) from the University Center and the hotels listed below.

### **CS50 Shuttle Service Hours of Operation**

**Thursday, April 20:** 7 a.m. - 11 p.m.

**Friday, April 21:** 7 a.m. - 9 p.m.

**Saturday, April 22:** 8 a.m. - 2 p.m.

#### *CS50 Shuttle Service hotel participants*

Shadyside Inn - Fifth Avenue

Residence Inn by Marriott – Fifth Avenue

Holiday Inn Select – Lytton Avenue

Hampton Inn – Boulevard of the Allies

Courtyard Marriott – Shadyside, Baum & Negley Avenues

Wyndham Garden – Forbes Avenue

These hotels also operate separate shuttle services. The shuttles run every hour on the half hour (e.g. 8:30, 9:30, 10:30) to and from the University Center.

**\*\*Check with the hotel for the shuttle hours of operation\*\***

### **CS50 Gala Reception**

Shuttles will be available to take guests to the CS50 Gala Reception which will be held at the National Robotics Engineering Consortium in Lawrenceville. Shuttles will depart from the University Center turn-around. Boarding will begin at 6:15 p.m.

## **PARKING**

Due to the numerous campus activities during this time parking is limited. We encourage all attendees to utilize the shuttle services if possible (see SHUTTLES).

Valet parking will be available in the East Campus Garage. A limited number of parking spaces will be available in the Morewood (across from Hamburg Hall) and Doherty parking lots. All other campus lots are permit-parking only.

Additional hourly parking is available at the Collaborative Innovation Center (on campus) and the Carnegie Museums' garage and lot located at the corner of South Craig and Forbes.

## **CS50 Off-campus events**

### **Gala Reception (Lawrenceville)**

Parking at the National Robotics Engineering Center is limited. Shuttle service will be provided for guests from campus to NREC (see "SHUTTLES")

### **Alumni and Friends After-Party (Circuit Center, Southside)**

Free parking is available adjacent to the building for guests.

## **SPRING CARNIVAL**

April 20-22

Spring Carnival activities begin Thursday. Events include Buggy Races, Midway (booths, games, rides) and more!

Carnival schedules will be available at the CS50 registration desk. You may also stop by the Carnegie Mellon Alumni Association Welcome Tent located near the Buggy finish line on Frew Street.

## **IN CASE OF EMERGENCY**

For emergencies contact campus police at 412-268-2323

# WEDNESDAY, APRIL 19

10:30 a.m.

## **CS50 Kick-off with Governor Ed Rendell**

CS50 Celebration Tent, University Center

Noon - 5 p.m.

## **CS50 Registration and Information Desk**

Wean Commons, University Center

## **LTI 20th Anniversary Celebration** *(invitation Only)*

1 - 2:30 p.m.

## **SPECIAL PRESENTATION: Betting on the Future**

Rick Rashid, Senior Vice President, Microsoft Research

3305 Newell-Simon Hall

5 - 7 p.m.

## **Entertainment Technology Center reception**

Reception including announcement of the 2006 Robot Hall of Fame inductees,

Pittsburgh Technology Center, 2nd Avenue

# THURSDAY, APRIL 20

7:30 a.m. - 7 p.m.

## **CS50 Registration and Information Desk**

Wean Commons, University Center

7:30 - 9 a.m.

## **Continental Breakfast**

University Center

9 a.m. - 4:30 p.m.

Parallel events including special interest anniversaries, receptions and faculty celebrations

- HCI 12th Anniversary Celebration**

Newell-Simon Hall

- LTI 20th Anniversary Celebration**

Adamson Wing, 136A Baker Hall

- Gary Miller 60th Birthday Celebration**

Giant Eagle Auditorium, Baker Hall

## **HISTORY OF COMPUTER SCIENCE AT CARNEGIE MELLON**

100 Porter Hall

**9 a.m. - 3 p.m.**

Eight early members of the computer science community will describe the remarkably fertile period of the 1950s when computer science took root here, the early years of the computer science department in the 1960s and early 1970s, and the evolution of the institution. The program is organized to encourage reflection and discussion.

9 - 9:30 a.m.

### **Growth of the Institution**

Angel Jordan (E'59)

9:30 - 10:30 a.m.

### **In the Beginning...**

Ed Feigenbaum (E'56,GSIA'60)

10 - 11:30 a.m.

### **Supply Chain Trading Agents: Competition-Based Research**

Session Chair:

Norman M. Sadeh, Associate Professor, School of Computer Science  
5409 Wean Hall

The Supply Chain Trading Agent Competition is an annual event in which agents compete against one another for customer orders for PCs and for the components required to assemble these PCs. Come and watch agents compete against one another, listen to live commentaries and hear from Carnegie Mellon faculty and alumni about the impact of trading technologies on today's and tomorrow's practices.

10:30 a.m. – Noon

### **PGP Key Signing Event**

1507 Newell-Simon Hall

Use PGP encryption? Come join us for a key-signing session!

## **HISTORY OF COMPUTER SCIENCE AT CARNEGIE MELLON**

100 Porter Hall

10:45 a.m. - Noon

### **Voices of the Titans: Reflections from our Founders (Session I)**

Moderator: **Rick Rashid** (CS Faculty, 1979-1991)

**C. Gordon Bell** (CS Faculty, 1966-72)

**Jesse Quatse** (S'58, E'62,'69)

**Richard Shoup** (E'65,CS'70)

11:30 a.m. - 1:30 p.m.

### **CS50 Luncheon**

Newell-Simon Hall Atrium

Noon - 1 p.m.

### **Women@SCS Outreach Roadshow**

4623 Wean Hall

The Roadshow is a presentation by a group of women undergraduate and graduate students in the School of Computer Science at Carnegie Mellon who talk about their early thoughts on Computer Science, why and how they began studying the area, their current experiences, what Computer Science means to them now, and their future hopes and expectations. The presentation includes a slide show, Q and

A interaction, and a demo. Women@SCS students have designed Roadshows for middle schools, for high schools and for undergrads to demonstrate the diversity of the field of computer science and of its participants. Please join us for a demo and discussion.

## **HISTORY OF COMPUTER SCIENCE AT CARNEGIE MELLON**

100 Porter Hall

1 - 2:30 p.m.

### **Voices of the Titans: Reflections from our Founders (Session II)**

Moderator: **Rick Rashid** (CS Faculty, 1979-1991)

**Charles M. Geschke** (CS'73)

**Renato Iturriaga** (S'64, CS'67)

**Joe Traub** (Head, Computer Science Department, 1971-79)

1:30 - 3 p.m.

### **Supply Chain Trading Agents: Competition-Based Research**

Session Chair:

Norman M. Sadeh, Associate Professor, School of Computer Science

5409 Wean Hall

The Supply Chain Trading Agent Competition is an annual event in which agents compete against one another for customer orders for PCs and for the components required to assemble these PCs. Come and watch agents compete against one another, listen to live commentaries and hear from Carnegie Mellon faculty and alumni about the impact of trading technologies on today's and tomorrow's practices.

3 - 4:30 p.m.

### **SharonFest: A Tribute to Sharon Burks**

5409 Wean Hall

### **StehlikFest: A Tribute to Mark Stehlik**

Celebration Tent, University Center

5 - 6:30 p.m.

### **50 Years of Computer Science Innovation**

Randy Pausch (CS'88), Professor, Computer Science, Human-Computer Interaction and Design, and Co-founder, Entertainment Technology Center

McConomy Auditorium, University Center

Over the last 50 years, Carnegie Mellon has had an unparalleled stream of technical, intellectual, and cultural innovations in the field of Computer Science. While

no talk could begin to comprehensively cover the breadth and depth of the innovation done on this campus over the last half-century, we will present examples from Carnegie Mellon's history, to the present, which demonstrate the vitality and creativity of the work done here.

7:30 - 10:30 p.m.

## **CS50 Gala Reception**

National Robotics Engineering Center (Lawrenceville)

# FRIDAY, APRIL 21

7:30 a.m. - 6:30 p.m.

## **CS50 Registration and Information Desk**

Wean Commons, University Center

7:30 - 8:30 a.m.

## **Continental Breakfast**

University Center

8:30 a.m. - 5:30 p.m.

## **Semicentennial Symposium**

8:30 - 10:30 a.m.

## **Semicentennial Symposium—Session I**

McConomy Auditorium, University Center

8:30 a.m.

## **Opening Remarks**

Jared L. Cohon, President, Carnegie Mellon University

Randal E. Bryant, Dean, School of Computer Science

9 a.m.

## **Does AI Need a Theory?**

Leslie G. Valiant, T. Jefferson Coolidge Professor of Computer Science and Applied Mathematics, Harvard University

Abstract Unavailable

9:45 a.m.

## **What Analytical Performance Modeling Teaches Us About Computer Systems Design**

Mor Harchol-Balter, Associate Professor, School of Computer Science, Carnegie Mellon University

Computer systems design is based on many commonly-held beliefs and heuristics, many of which have never been challenged:

- Thousands of server farm “load balancing” policies do exactly that — they aim to balance the load among the servers. But is load balancing necessarily a good thing?

- Consider a choice between a single machine with speed  $s$ , and  $n$  identical machines with speed  $s/n$ . Which would you choose? Are you always right?
- Scheduling policies which favor “short” jobs, like Shortest-Remaining-Processing-Time-First (SRPT) are often avoided because it is feared that they starve the “long” jobs. But does favoring “short” jobs necessarily hurt “long” ones?
- Cycle stealing between a “donor” machine and a “beneficiary” machine is a central theme in distributed systems. The donor machine helps the beneficiary machine with jobs, whenever the load at the donor machine is below some threshold. But why are we giving the donor machine all the control?

In this talk, we will consider these and other fundamental questions in system design and look at how new research in analytical performance modeling helps us overturn some age-old beliefs.

11 a.m. - 12:30 p.m.

### **Semicentennial Symposium—Session II**

McConomy Auditorium, University Center

11 a.m.

### **The Global Integration Agenda**

Alfred Z. Spector, Vice President of Strategy and Technology, IBM Software Group

After fifty years of I/T investment, almost one quarter of the accumulated U.S. private fixed equipment assets are now computers, software, and networking products. There is tremendous diversity of technology and applications, and this diversity has two clear implications: (1) The integration of information and process in the global economy is inherently complex: dynamic, heterogeneous, multi-generational and almost unbounded in scale. (2) The integration will have manifold benefits and will continue to generate tremendous research and development opportunities.

This presentation lays out key elements of the technology agenda for people, process, and information integration, with a particular focus on the implications for both computer science education and research.

11:45 a.m.

### **The Best Things I Learned at CMU (and Elsewhere)**

Robert P. Colwell (E’78, ‘85), President, R&E Colwell and Associates

Getting older has one redeeming characteristic: it affords you a platform from

which to look backwards and see milestones and key concepts, the significance of which were not nearly so clear at the time. We engineers design things; that necessarily means we try to envision the future and then try to realize that vision. But our collective ability to predict the future has never really been all that hot. (Any of you who bought Netscape, Yahoo, eBay or Google at the right time and are now ridiculously wealthy, you can stop reading, this doesn't apply to you.) Still, we must try. It's been said that the best predictor of the future is the past. So the occasion of Carnegie Mellon's Computer Science Department's 50th anniversary seems a great time to look backwards, extract the lessons of our industry for the past few decades, and see what patterns emerge and what they might tell us about our technological future.

11:45 a.m. - 1:30 p.m.

### **CS50 Luncheon**

Celebration Tent, University Center

Noon - 2 p.m.

### **12th Annual Robot Races**

Race Course, Front of Wean Hall

1:45 - 3:30 p.m.

### **Semicentennial Symposium—Session III**

McConomy Auditorium, University Center

1:45 p.m.

### **Welcome Remarks**

Mark S. Kamlet, Provost, Carnegie Mellon University

2 p.m.

### **Research and the U.S. Innovation Enterprise**

Anita Jones (CS'73), Lawrence R. Quarles Professor of Engineering and Applied Science, University of Virginia

University research contributes substantially to innovation in the U.S. Carnegie Mellon has been a key participant in the advancement of information technology since before the inauguration of the Department of Computer Science. New knowledge enables innovation, which in turn enables productivity, which drives economic growth. The university is especially important because in the crucible of new knowledge creation, it educates students who carry that knowledge out into society, including industry. This talk will discuss the place of the university in the U.S. Innovation Enterprise, with some anecdotal stories about CMU CS and contributions of some of the stellar individuals.

2:45 p.m.

## **Leadership and Engineering**

Charles E. Leiserson (CS'82), Professor of Computer Science and Engineering,  
MIT Computer Science and Artificial Intelligence Laboratory

Top engineering schools, like Carnegie Mellon and MIT, are renowned for their ability to teach “left-brain” skills to their students. But what of “right-brain” skills, such as creativity, the ability to deal emotionally with conflict, and self-motivation? Arguably, these abilities are as important to engineering leadership as are “nerdy” skills. CMU’s “reasonable-person principle” is but one example of how a right-brain cultural norm can leverage the left-brain abilities of a group’s members.

In this talk, I will share some experiences from two programs at MIT that teach leadership skills to engineering students and faculty. The “Undergraduate Practice Opportunities Program” (UPOP) is a summer-internship program now taken by half of MIT’s engineering sophomores. UPOP begins with a week-long workshop, of which I am the School of Engineering Co-Director, where the students learn about real-world practice, group decision-making, and how to communicate effectively with people who think differently. The second program is a three-day workshop called “Leadership Skills for Engineering Faculty”, which I offer to MIT’s School of Engineering faculty. This faculty workshop focuses on human-centered strategies for leading effective research groups and teaching staff in academic engineering settings.

Since leadership styles are highly individual and situational, these two programs offer no dogma about how to lead. Instead, they attempt to provide a nonjudgmental yet structured environment in which participants can discover what works for them. Pedagogical tools include interactive role-playing, validated self-assessment instruments, and group discussions. Anecdotal (self-reported) evidence indicates that these programs expand participants’ repertoire of strategies for addressing human-centered issues in engineering, as well as enhance their self-understanding as leaders.

2 - 3:30 p.m.

## **Robotics Club Open House**

University Center, Lower Level 89A

3:30 p.m.

## **The 15th Gate: Mobot Award Ceremony**

7500 Wean Hall

4 - 5:30 p.m.

## **Semicentennial Symposium—Session IV**

McConomy Auditorium, University Center

4 p.m.

### **Computer Scientists Can Save the World**

Latanya Sweeney, Associate Professor of Computer Science and Public Policy,  
School of Computer Science, Carnegie Mellon University

Tomorrow's computer scientists must construct technology that is provably appropriate for the setting in which the technology will be used else risk abandonment of the technology altogether. Privacy poses an example. Recent news articles have ignited public concern over issues of privacy in emerging technologies. Concern is justified, and when forced to choose, society has often rejected technology in favor of historical norms. Computer scientists can do better by designing privacy protections into the technology they build in order to ensure adoption.

This talk introduces Technology Dialectics as a new research paradigm for preventing or minimizing clashes between emerging technologies and the settings in which they are to be deployed. With respect to privacy, Technology Dialectics involves creating technologies and related policies with provable guarantees of privacy protection while allowing society to collect and share private (or sensitive) information for many worthy purposes. To accomplish this goal, researchers design their technology in such a way as to resolve clashes, and in doing so, construct conflict-free technology. In the absence of Technology Dialectics, researchers use *ad hoc* approaches that tend to lack protection and utility or that have nice mathematical properties but lack real-world applicability. Examples are drawn from real-world privacy problems, such as law enforcement, counter terrorism, and medical research. Privacy technology solutions aimed at addressing these problems and that adhere to Technology Dialectics are presented and discussed.

4:45 p.m.

### **The Million Book Digital Library Project: Research Problems in Text Mining**

Co-presenters:

**Raj Reddy**, Mozah Bint Nasser University Professor of Computer Science and Robotics, School of Computer Science, Carnegie Mellon University

**Jamie Carbonell**, Allen Newell Professor of Computer Science and Director, Language Technologies Institute, Carnegie Mellon University

Creating a universal, free to read, digital library containing all the books ever published is technically feasible today. Google, Yahoo and Microsoft have all an-

nounced their intention to scan and make available books of interest to the public. Unfortunately many of these will be in languages inaccessible to over 80% of the world's population. Even when books in non-native languages become available online, their content will remain incomprehensible to most people. Natural Language Processing Technology is not yet perfect but promises to provide a way out of this conundrum. In this talk, we will discuss some unique research problems in text mining and discovery that arise in digital libraries and other online content such as multi-lingual search, translation and summarization.

6 - 7:30 p.m.

**Preview: Gates Center for Computer Science**

Celebration Tent, University Center

9 p.m.

**Alumni & Friends After-Party!**

Circuit Center, Southside (Carson St. and Hot Metal Bridge).

Come enjoy the food, people and music on the Southside.

Live performance by Bill Deasy and band! (show begins at 10:15 p.m.)

Electric Sheep Art Demonstration by alumnus Scott Draves, Ph.D. (CS'97)

“The Electric Sheep and their Dreams in High Fidelity: abstract animation madewith a cyborg mind of 30,000 computers and people mediated by a genetic algorithm.”

All SCS alumni, faculty, staff and students are welcome!

# SATURDAY, APRIL 22

8 a.m. – Noon

## **CS50 Registration and Information Desk**

Wean Commons, University Center

8 - 9:30 a.m.

## **CS50 Continental Breakfast**

University Center

8:30 a.m. - 5:30 p.m.

## **EMC<sup>2</sup> A State Explosive Celebration Honoring Edmund M. Clarke, Jr.**

Singleton Room, Roberts Engineering Hall

9 a.m. – Noon

## **Lab tours, demonstrations, open houses, and social events**

### *RoboTours*

Three tours will be offered. Space is **limited**. Sign-up is required and will be available at the CS50 Registration Desk

Tour Times: 9 a.m., 10 a.m., and 11 a.m.

9:30 a.m. - Noon

## **Software Engineering Open House**

Vision Services Building, 300 South Craig Street (2nd Floor)

10 -11 a.m.

## **Jim Tomayko Memorial Service**

Vision Services Building, 300 South Craig Street (2nd Floor)

10:30 – Noon

## **Entertainment Technology Center Tour and Demonstrations**

Pittsburgh Technology Center, 2nd Avenue

4 p.m.

## **Jim Tomayko Memorial Softball Game**

Gesling Stadium Softball Field



## CS50 Anniversary Celebration Program-at-a-Glance

<b>WEDNESDAY, APRIL 19</b>		
10:30 a.m.	<b>CS50 Kickoff with Governor Rendell</b> CS50 Celebration Tent	
11 a.m.		
11:30 a.m.		
Noon	<b>CS50 Registration and Information Desk Opens</b>  Wean Commons, University Center	
12:30 p.m.		
1 p.m.		<b>SPECIAL PRESENTATION:</b> <b>“Betting on the Future”</b> Rick Rashid, Sr. Vice President, Microsoft Research (3305 Newell-Simon Hall)
1:30 p.m.		
2 p.m.		
2:30 p.m.		
3 p.m.		
3:30 p.m.		
4 p.m.		
4:30 p.m.		
5 p.m.	<b>Entertainment Technology Center Reception</b> Pittsburgh Technology Center, 2nd Avenue	
5:30 p.m.		
6 p.m.		
6:30 p.m.		
7 p.m.		

**CS50 Program-at-a-Glance**  
**THURSDAY, APRIL 20**

		<b>History of Computer Science</b> Moderator: Rick Rashid All Sessions: 100 Porter Hall	
7:30 a.m.	<b>CS50 Registration and Information Desk Open</b>  Wean Commons, University Center	<b>Continental Breakfast</b> (7:30 a.m.)	
8 a.m.			
8:30 a.m.			
9 a.m.		<b>Growth of the Institution</b> (A. Jordan) (9 a.m.)	
9:30 a.m.		<b>In the Beginning...</b> (E. Feigenbaum) (9:30 a.m.)	
10 a.m.			
10:30 a.m.			
10:45 a.m.		<b>Voices of the Titans</b> (G. Bell, J. Quatse, R. Shoup) (10:45 a.m.)	
11 a.m.			
11:30 a.m.	<b>CS50 Luncheon</b> Newell-Simon Hall Atrium and Porter Hall		
Noon			
12:30 p.m.			
1 p.m.		<b>Voices of the Titans</b> (C. Geschke, R. Iturriaga, J. Traub) (1 p.m.)	
1:30 p.m.	<b>CS50 Registration and Information Desk Open</b>  Wean Commons, University Center		
2 p.m.			
2:30 p.m.			
3 p.m.			
3:30 p.m.			
4 p.m.			
4:30 p.m.			
5 p.m.		<b>50 Years of Computer Science Innovation</b> McConomy Auditorium, University Center (5 p.m.)	
5:30 p.m.			
6 p.m.			
6:30 p.m.			
7:30 p.m.	<b>Gala Reception</b> National Robotics Engineering Center (Lawrenceville) (7:30 p.m.)		
8 p.m.			
8:30 p.m.			
9 p.m.			
9:30 p.m.			
10 p.m.			

**Special Interest Events and Anniversary Celebrations**

**HCII 12th Anniversary**

3305 Newell-Simon  
(8 a.m. - 4 p.m.)

**LTI 20th Anniversary**

Adamson Wing, Baker Hall (136A)  
(8 a.m. - 4 p.m.)

**Millerfest 2006**

Giant Eagle Auditorium,  
Baker Hall  
(9 a.m. - 4:30 p.m.)

**Supply Chain  
Trading Agents**

5409 Wean Hall  
(10:30 a.m.)

**PGP Key Signing**

1507 Newell-Simon  
(10:30 a.m.)

**Women@SCS Roadshow**

4623 Wean Hall  
(Noon)

**Supply Chain Trading Agents**

5409 Wean Hall  
(1:30 p.m.)

**Sharonfest**

5409 Wean  
(3 p.m.)

**Stehlikfest**

Celebration Tent, UC  
(3 p.m.)

# CS50 Program-at-a-Glance

## FRIDAY, APRIL 21

		<b>Semicentennial Symposium</b> McConomy Auditorium, University Center	
7:30 a.m.	<b>CS50 Registration and Information Desk</b>  Wean Commons, University Center	<b>Continental Breakfast</b> , University Center	
8 a.m.			
8:30 a.m.		<b>Session I</b> <b>Opening Remarks and Welcome</b> Jared Cohon, President Randy Bryant, Dean, School of Computer Science	
9 a.m.		Does AI Need Theory? (L.A. Valiant)	
9:30 a.m.		What Analytical Performance Modeling Teaches Us About Computer Systems Design (M. Harchol-Balter)	
10 a.m.			
10:30 a.m.			
11:00 a.m.		<b>Session II</b> The Global Integration Agenda (A. Spector) The Best Things I Learned at CMU (R. Colwell)	
11:30 a.m.		<b>CS50 Lunch</b>  CS50 Celebration Tent	
Noon			
12:30 p.m.			
1:00 p.m.			
1:30 p.m.			<b>Session III (1:45 p.m.)</b> Welcome Remarks, Mark Kamlet Research and the U.S. Innovationn Enterprise (A. Jones) Leadership and Engineering (C. Leiserson)
2 p.m.			
2:30 p.m.			
3 p.m.			
3:30 p.m.			
4 p.m.			<b>Session IV</b> Computer Scientists Can Save the World (L. Sweeney) The Million Book Digital Library Project (R. Reddy, J. Carbonell)
4:30 p.m.			
5 p.m.			
5:30 p.m.			
6 p.m.		<b>Preview: Gates Center</b> CS50 Celebration Tent, University Center	
6:30 p.m.			
7 p.m.			
7:30 p.m.			
9 p.m.	<b>SCS Alumni and Friends After-Party</b> Circuit Center, Southside (Cason Street and Hot Metal Bridge) Performance by Bill Deasy and Band Computer Art Demo "Electric Sheep" by Scott Draves, Ph.D. (CS'97)		

**Special Interest Events**

**12th Annual Mobot Races (Noon)**  
Race Course, Front of Wean Hall

**Robotics Club Open House (2 p.m.)**  
University Center (Lower Level 89A)

**The 15th Gate: Mobot Award Ceremony (3:30 p.m.)**  
7500 Wean Hall

**CS50 Program-at-a-Glance**  
**SATURDAY, APRIL 22**

8 a.m.	<b>CS50 Registration and Information Desk</b>  Wean Commons, University Center	<b>Continental Breakfast</b> , University Center			<b>EMC2: A State Explosive Celebration Honoring Edmund M. Clarke, Jr.</b>  Singleton Room, Roberts Engineering Hall	
8:30 a.m.		<b>Robo- Tours (9 a.m.)</b>	<b>Software Engineering Open House (9:30 a.m.)</b>  Visions Services Building 300 S. Craig Street	<b>Tomayko Memorial Service (10 a.m.)</b>  Vision Services Building 300 S. Craig Street		
9 a.m.						<b>ETC Tour (10:30 a.m.)</b>  PTC, 2nd Avenue
9:30 a.m.						
10 a.m.						
10:30 a.m.						
11 a.m.						
11:30 a.m.						
Noon						
12:30 p.m.						
1 p.m.						
1:30 p.m.						
2 p.m.						
2:30 p.m.						
3 p.m.						
3:30 p.m.						
4 p.m.	<b>Tomayko Memorial Softball Game</b>					
4:30 p.m.	Gesling Stadium Softball Field					
5 p.m.						
5:30 p.m.						
6 p.m.						



## **ACKNOWLEDGMENTS**

In addition to supporting the scheduled events, many other Carnegie Mellon groups have contributed their research or other expertise to make this event a success.

### **CS50 WEBCAST OF LECTURES**

- We are webcasting many of the sessions live thanks to the End System Multicast (ESM) of Hui Zhang and his students.

### **SCS COMMUNITY ORAL HISTORIES PROJECT**

- University Libraries is supporting the collection of oral histories from many of our out-of-town alumni and former faculty to include in the University Archives. They will continue over time to collect oral histories from people living in the Pittsburgh area.

### **COMPUTER SCIENCE COMMUNITY BOOKS**

- The Carnegie Mellon bookstore has ordered a wide selection of books by Carnegie Mellon computer scientists for display on their “Faculty Authors” shelves. These and other books are listed in a brochure in your registration packet and online at <http://spoke.compose.cs.cmu.edu/shaweb/r/books/cmu-books.htm>

### **E-BOOK PROJECT**

- As We See It: Perspectives from the Carnegie Mellon Community Whereas our previous anniversary celebrations were captured in books of plenary talks, this year we will take snapshot in the form of an electronic collection of reflections contributed by members of the computer science community at Carnegie Mellon, both past and present. Details are at <http://www.rr.cs.cmu.edu/CS50perspectives.html>

### **SCS Virtual Community**

To help our community stay connected we have established the SCS Virtual Community. The on-line community serves as a virtual gathering point to share our accomplishments with those affiliated with the School of Computer Science. Stay connected with your colleagues and friends. To learn more visit [http://www.cs50.cs.cmu.edu/virtual\\_index.php](http://www.cs50.cs.cmu.edu/virtual_index.php)

#### *Additional Thanks to*

- \* National Robotics Engineering Center (NREC) for hosting the CS50 Gala celebration.
- \* Division of University Advancement for sponsoring the Gates Center Preview event.
- \* Roger Dannenberg for providing McBlare, the robotic bagpiper.

## **ABOUT THE SCHOOL**

**The first computer arrived on campus in 1956 and we've been going strong ever since. Today, the School of Computer Science is one of the largest, broadest, and strongest information technology research orga-**

*“Computing at Carnegie Mellon evolved the way it should everywhere, but doesn't. There was a confluence of minds, tools and problems, an absence of administrative blindness, and an appreciation of the potential and consequences that spread far...”*

- Alan Perlis, first Computer Science Department head

The School of Computer Science (SCS) began as the doctoral-granting Computer Science Department in 1965 and became an independent school within the university in 1988. Our highly regarded undergraduate program was founded in 1990. SCS faculty, researchers and students are known for making breakthroughs that have real-world applications in operating systems, programming languages, software engineering, wearable computers, ubiquitous computing, networks, educational computing systems and robotics. Interdisciplinary collaborations with colleagues across the campus enrich the flow of ideas and information.

To learn more visit the School of Computer Science website  
<http://www.cs.cmu.edu>