User Centered Design Process
January 4 - March 1

History of user centered design in HCI
March 6, March 8

Academic HCI
March 13, March 15

Special topics in HCI
March 20, March 22

Course Review
March 27

Presentation 2
March 29

Last class
April 3
Academic HCI

Human-Computer Interaction -

a discipline concerned:

- with the design, evaluation and implementation of interactive computing systems for human use

and

- with the study of major phenomena surrounding them

Hewett; Baecker; Card; Carey; Gasen; Mantei; Perlman; Strong; Verplank. "ACM SIGCHI Curricula for Human-Computer Interaction". ACM SIGCHI.
SIGSOC - ACM Special Interest Group on Social and Behavioral Computing

1969-1982

Greg Marks, Chair of the SIGSOC

Lorraine Borman, Editor of the SIGSOC Bulletin
Greg Marks, Chair of the SIGSOC

Lorraine Borman, Editor of the SIGSOC Bulletin

"I believe that SIGSOC has a responsibility to become actively concerned with the social and behavioral aspects of computing...SIGSOC can serve both a coordination and a dissemination of information function for current research in the areas of the user interface to interactive systems, the human factors that affect use of languages, packages, terminals, etc. ... In every journal, in every discussion these days, we hear that systems aren't being used as the designers envisioned: it is time to emphasize research directed towards the users. The days of computer-oriented people are passing: the new era must lead towards people-oriented computers."

Lorraine Borman, SIGSOC Bulletin, Spring 1978, Volume 9
Greg Marks, Chair of the SIGSOC

Lorraine Borman, Editor of the SIGSOC Bulletin

"I believe that SIGSOC has a responsibility to become actively concerned with the social and behavioral aspects of computing...SIGSOC can serve both a coordination and a dissemination of information function for current research in the areas of the user interface to interactive systems, the human factors that affect use of languages, packages, terminals, etc. ... In every journal, in every discussion these days, we hear that systems aren't being used as the designers envisioned: it is time to emphasize research directed towards the users. The days of computer-oriented people are passing: the new era must lead towards people-oriented computers."

Lorraine Borman, SIGSOC Bulletin, Spring 1978, Volume 9
Academic HCI

Hewett; Baecker; Card; Carey; Gasen; Mantei; Perlman; Strong; Verplank. "ACM SIGCHI Curricula for Human-Computer Interaction". ACM SIGCHI.
Academic HCI

Content of HCI field

Nature Of HCI

Use and Context of Computers

Human Characteristics

Computer System and Interface Architecture

Development Process

(Meta-)Models of HCI

Human Social Organization and Work

Human Information Processing

Input and Output Devices

Design Approaches

Application Areas

Language, Interaction, Communication

Dialogue Techniques and Genre

Implementation Techniques

Human-Machine Fit and Adaptation

Ergonomics

Dialogue Architecture

Evaluation Techniques

Hewett; Baecker; Card; Carey; Gasen; Mantei; Perlman; Strong; Verplank. "ACM SIGCHI Curricula for Human-Computer Interaction". ACM SIGCHI.
Academic HCI

Some SIGCHI conferences

- CHI - Computer-Human Interaction
- IUI - Intelligent User Interfaces
- MobileHCI - HCI with Mobile Devices and Services
- CHIPlay - Computer-Human Interaction in Play
- UIST - User Interface Software and Technology
- DIS - Designing Interactive Systems
- PerDis - The International Symposium on Pervasive Displays
- GI - Graphics Interface
- CSCW - Computer Supported Cooperative Work
- Ubicomp - Pervasive and Ubiquitous Computing
- ICMI - International Conference on Multimodal Interaction
- TVX - Interactive Experiences for TV and Online Video
Ubiquitous Computing - Paradigm in which computing is made to appear anytime and everywhere, through distributed networked processing devices
Ubiquitous Computing - Paradigm in which computing is made to appear anytime and everywhere, through distributed networked processing devices

Term coined by Mark Weiser in late 1980s


The most profound technologies are those that disappear into the background and become indistinguishable from the everyday environment
Ubiquitous Computing -
Paradigm in which computing is made to appear anytime and everywhere, through distributed networked processing devices

Term coined by Mark Weiser in late 1980s

Two crucial issues: location and scale
A. Chua et al. “Shared Bicycling Over Distance”, CHI’17
Computer-Supported Cooperative Work (CSCW) -
area concerned with understanding of the way people work in groups with the enabling technologies of computer networking, and associated hardware, software, services and techniques (Paul Wilson, 1991)

Term coined by Irene Greif and Paul Cashman in 1984


Groupware - software designed to support collaborative activities and their coordination. Term coined by Trudy and Peter Johnson-Lenz, 1978-1981
Academic HCI

Johansen, R. Groupware: Computer Support for Business Teams, 1988
<table>
<thead>
<tr>
<th>Communication</th>
<th>Real time</th>
<th>Asynchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Telephone</td>
<td>Email</td>
</tr>
<tr>
<td></td>
<td>Video conferencing</td>
<td>Voice mail</td>
</tr>
<tr>
<td></td>
<td>Instant messaging</td>
<td>Blogs</td>
</tr>
<tr>
<td></td>
<td>Texting</td>
<td>Social networking sites</td>
</tr>
<tr>
<td>Information sharing</td>
<td>Whiteboards</td>
<td>Document repositories</td>
</tr>
<tr>
<td></td>
<td>Application sharing</td>
<td>Wikis</td>
</tr>
<tr>
<td></td>
<td>Meeting facilitation</td>
<td>Web sites</td>
</tr>
<tr>
<td></td>
<td>Virtual worlds</td>
<td>Team workspaces</td>
</tr>
<tr>
<td>Coordination</td>
<td>Floor control</td>
<td>Workflow management</td>
</tr>
<tr>
<td></td>
<td>Session management</td>
<td>CASE tools</td>
</tr>
<tr>
<td></td>
<td>Location tracking</td>
<td>Project management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calendar scheduling</td>
</tr>
</tbody>
</table>

From: J. Grudin, S. Poltrock, "Computer Supported Cooperative Work." The Encyclopedia of Human-Computer Interaction, 2nd Ed
Analyzing disasters on social media: Kate Starbird at the GeekWire Summit
Academic HCI

HCI for Development (HCI4D) -
area concerned with understanding the use and appropriate design of information and communication technologies (ICTs) in the context of developing regions

