

CMSC 434
Introduction to
Human Computer Interaction

François Guimbretière
CSIC 1121 Tue-Thu 3:30-4:45

CMSC 434 Administrvia

- Instructor
 - François Guimbretière (HICL)
 - *Office hours (Room 3267 AVW):*
 - Tue, Thu 10:00am – 11:00am
 - or by email any time: francois@cs.umd.edu
 - or by appointment
 - drop in/telephone discouraged
- TA
 - Hyoungjune Yi
 - *Office hours (Room 1112 AVW)*
 - Mon, Fri 1:00pm-2:00pm
 - aster@cs.umd.edu

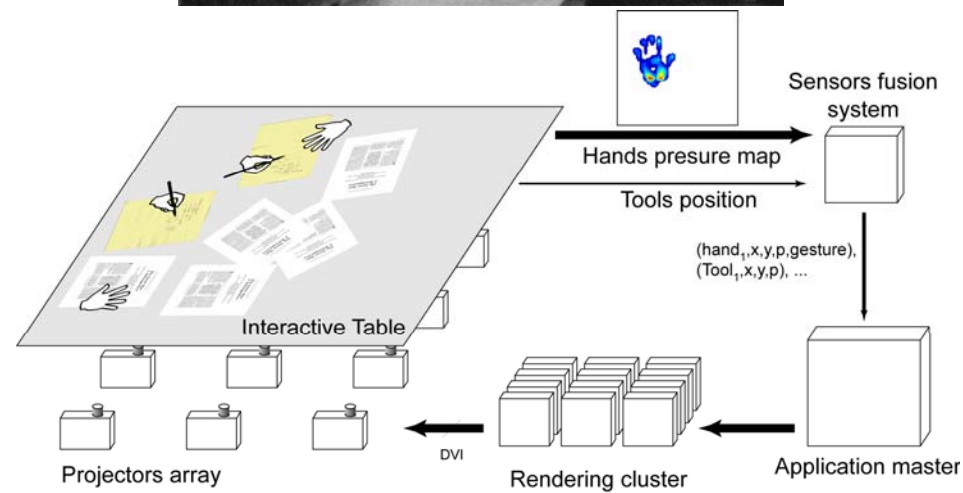
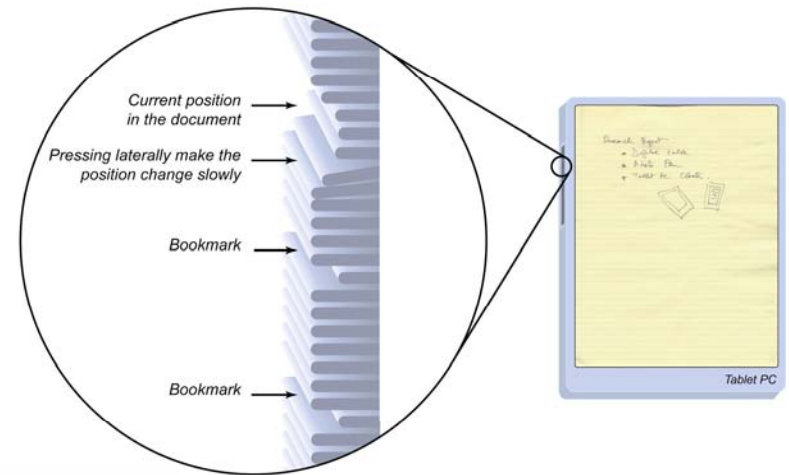
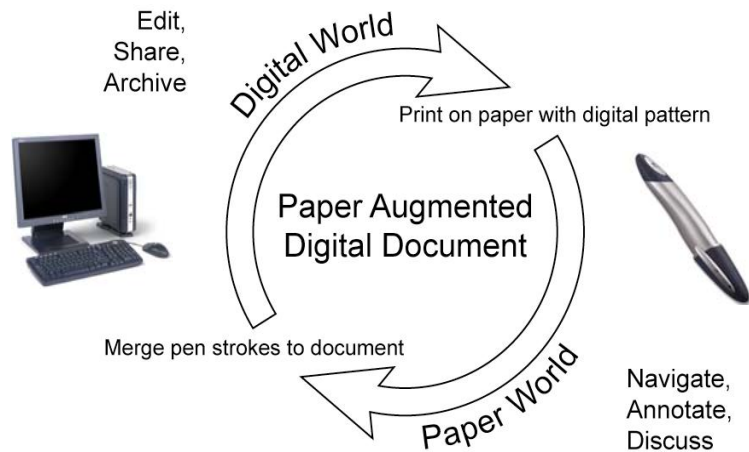
My research interests

- Human Computer Interaction
 - People, Paper and Computer
 - Better interaction techniques and command mechanisms
- Information Visualization
 - How to study very large trees
- Let me know if you are interested in participating in research project

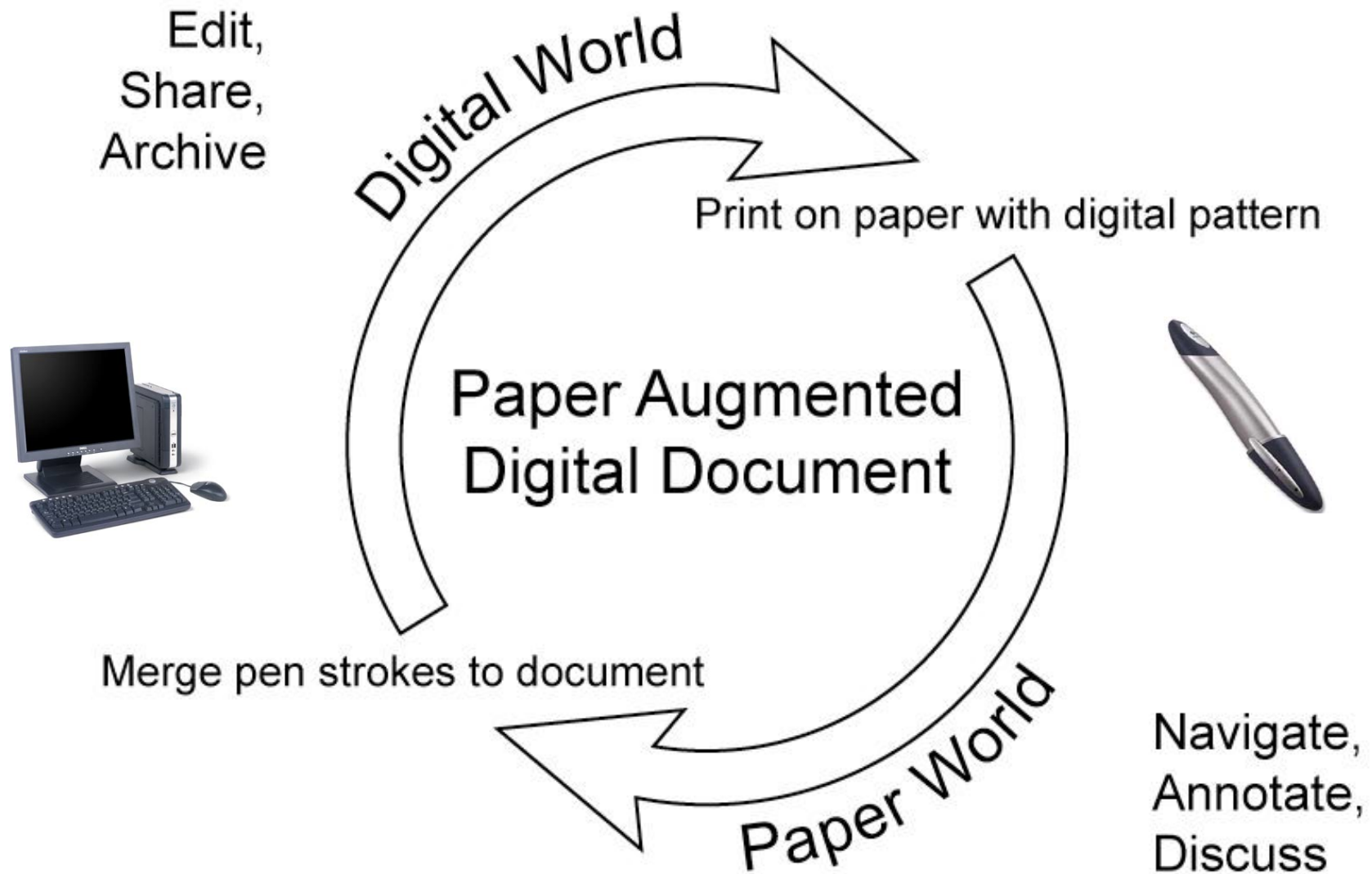
People, Paper and Computers

How can we narrow the bridge between paper and computer?



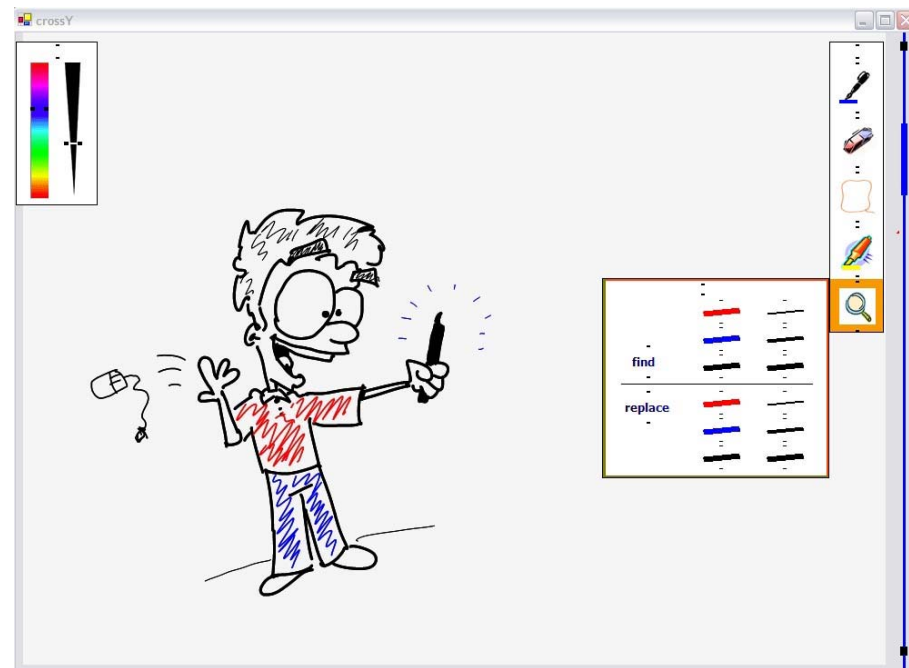


PADD



CrossY

- Tool to explore crossing based interfaces



Computer interaction today



- fixed environment, stable
- indirect interaction
- precise aiming easy

Soon on your lap



- portable, unstable environment
- direct interaction
- low precision aiming

Student info

- Name, e-mail
- Are you taking the class for credit?
- Why are you taking the class?
 - Goals
 - Topics you would like to be covered in the class
- Do you own (or have access to)
 - A car radio, a cell phone, a MP3 player, a remote control
 - A digital camera
- Additional comments

HCI

Human – Computer – Interaction

HCI

Human – Computer – Interaction

ACM definition:

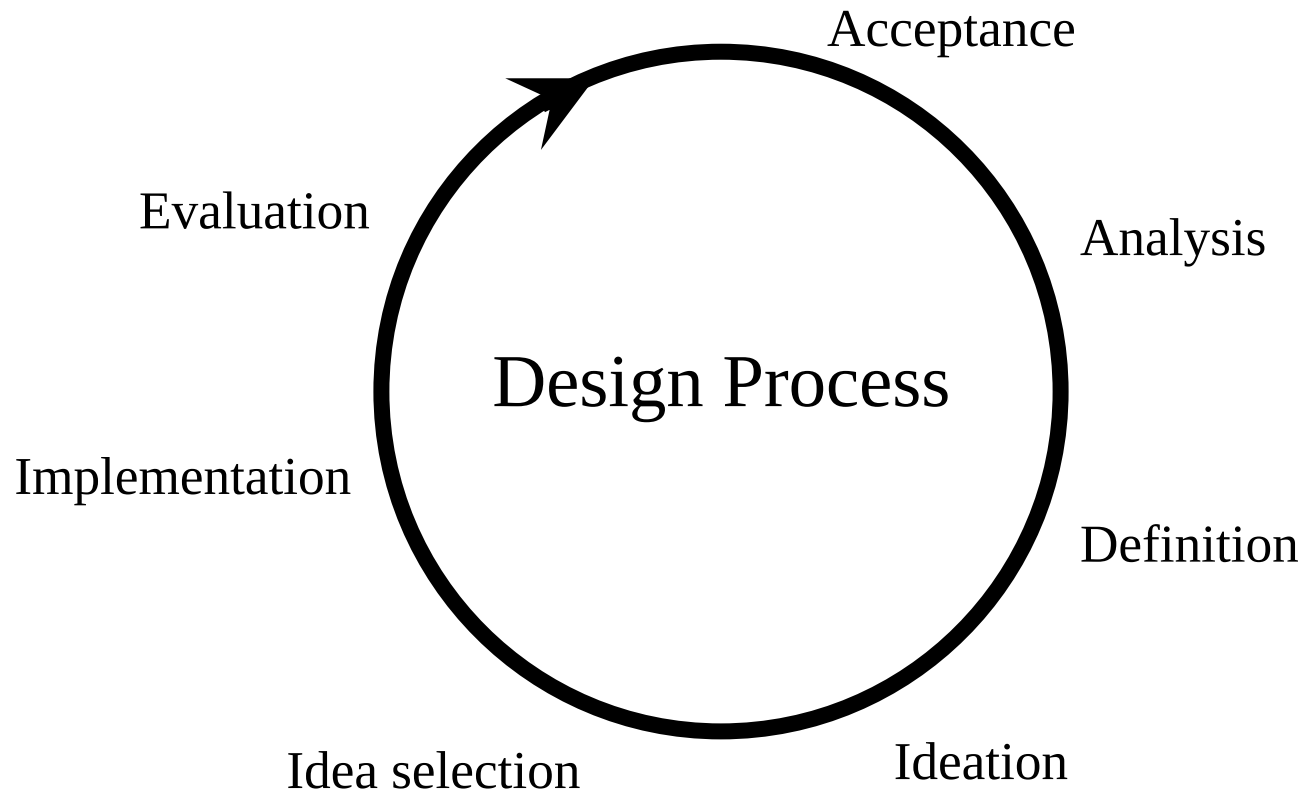
A discipline concerned with the

*design,
implementation, and
evaluation*

of interactive computing systems for human use.

PCD?

- People – Computer – Design (Winograd)
- “The universal traveler” (Koberg & Bagnall)



What you will learn

- Basic human factors
 - Characteristic of the human information processor
- Basic interface technology
 - Hardware
 - Software
- Principle of design
 - How to identify needs
 - How to create/imagine possible solutions
 - How to select and implement a solution
 - How to evaluate the result

Work load

- Reading
 - A chapter a class
- Homework
 - 8 homework (~1 week each)
 - By yourself
- Projects
 - 1 projects, 4 phases (3 weeks each)
 - In groups of 3-4 people
 - Deadline to pick your project: 02/03/05
- Late assignments policy
 - -20% up to 24 hours late
 - -50% up to 48 hours late
 - -100% after that

How you will be evaluated

- Homeworks (20%)
- Projects (40%)
 - Step 1-4, 10% each
- Exams (30%)
 - mid-term (10%)
 - final (20%)
- Class Participation (10%)

*You must pass both exam components
and
project components to pass the course*

Academic honesty

- Projects are group assignments
 - Each member should carry his/her load
 - Discussing with other group in general term is OK
 - Copying (verbatim or not) is not
- Homeworks are individual assignments
 - Discussing with other students in general term is OK
 - Copying (verbatim or not) is not
- Exams are individual works
 - No communication at all between students
- Violation of course (or University academic honesty) rules
 - Hearing with the judicial program

Text and additional references

- Reader
 - Should be ready shortly
 - Other reading available at the CS library
- Recommended text
 - **Designing the User Interface: Strategies for Effective Human-Computer Interaction**, 4rd Edition, Shneiderman and Plaisant [Addison-Wesley], 1998.
 - **Bringing Design to software**, Winograd (Editor) [Addison-Wesley], 1996.
- Course web sites:
 - <http://www.cs.umd.edu/class/spring2005/cmsc434/>
- Course WIKI:
 - <http://jazz.cs.umd.edu:8080/cmsc434/cmsc434.wiki>

Human versus Machine

Human traits Computer traits

Human versus Machine

Human traits	Computer traits
Incredibly slow	Incredibly fast
Error-prone	Error free
Irrational	Deterministic
Emotional	Apathetic
Inferential	Literal
Random	Sequential
Unpredictable	Predictable
Ethical	Amoral
Intelligent	Stupid

(from *The Inmates are running the asylum* by Alan Cooper)