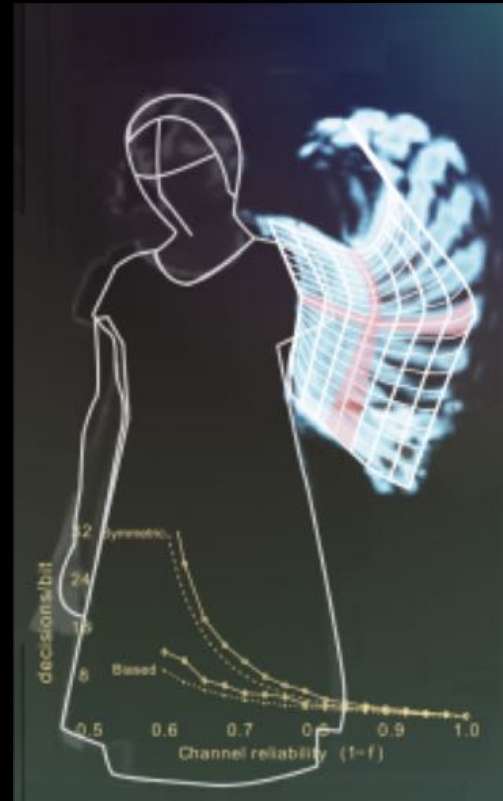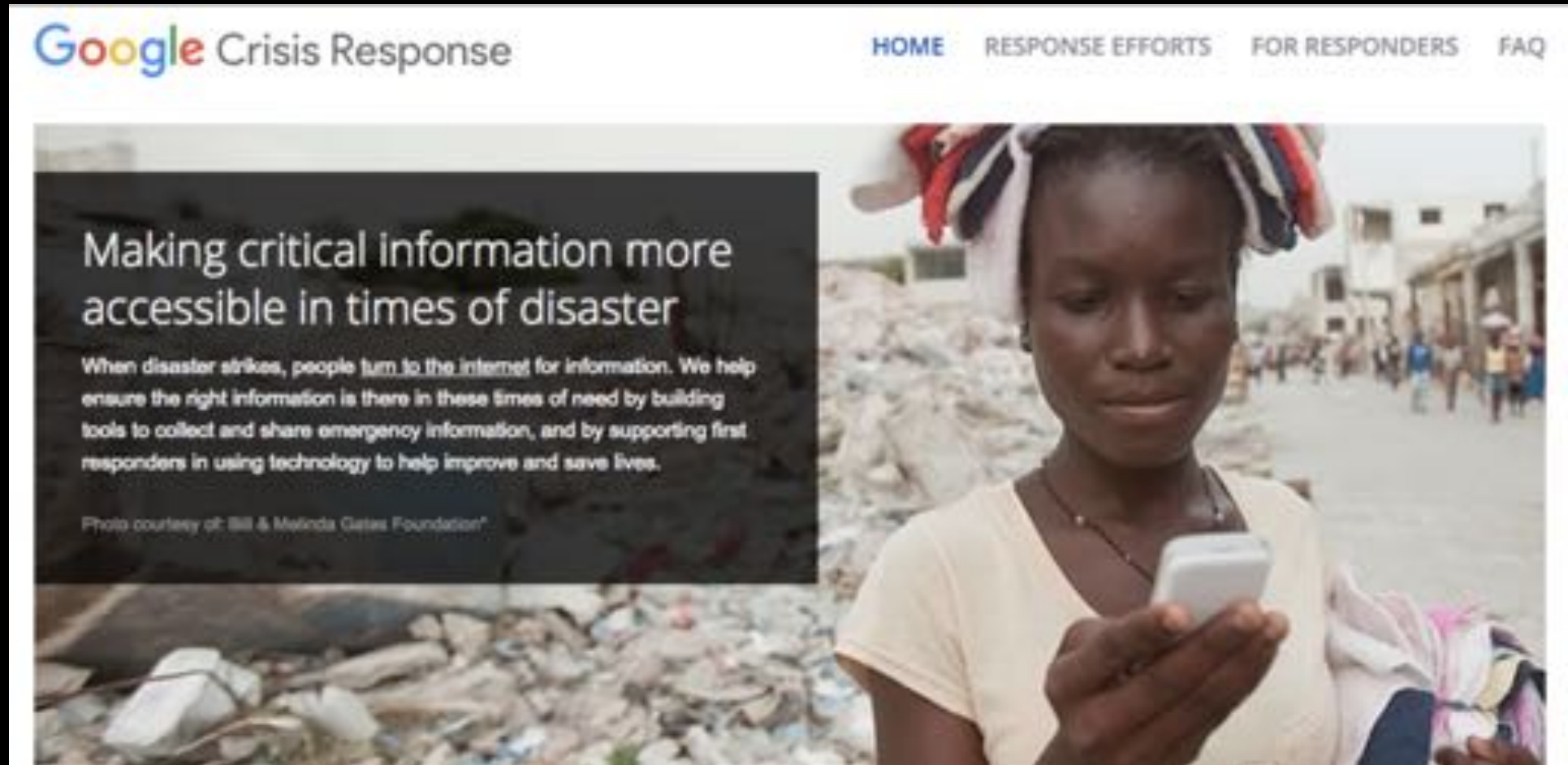# Why is HCI important?

- I have high expectations of this class
- I want to inspire your creative problem solving energy to HCI challenges

HCI Sits at the Interface of Many Disciplines

HCI Can Help People

HCI Advances Computing in Real World Contexts

Who am I?

- Lecturer: Dr Julie R. Williamson
  - Office: SAWB 407
  - Email: Julie.Williamson@glasgow.ac.uk
- Demonstrators:

Who Am I?

- Dr Julie R. Williamson
  - Lecturer in Computing Science
- Phd Computing Science
  - University of Glasgow
- BS Informatics
  - University of California, Irvine
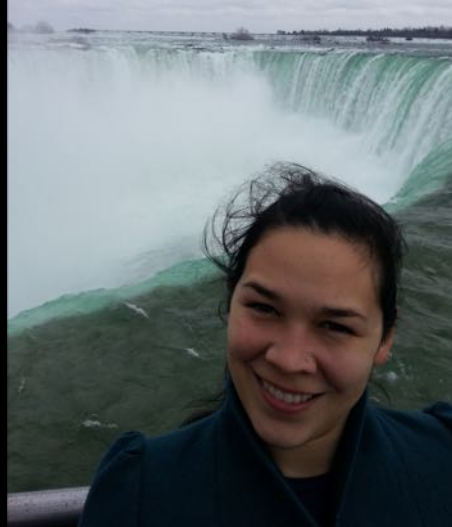
Who are you?

Office Hours

- Office Hours: By Appointment Only (Email to make an appointment)
- Questions by Email
  - Address emails properly
  - Sign with your name
  - Responses will be anonymised and copied to the rest of the class or posted on Moodle
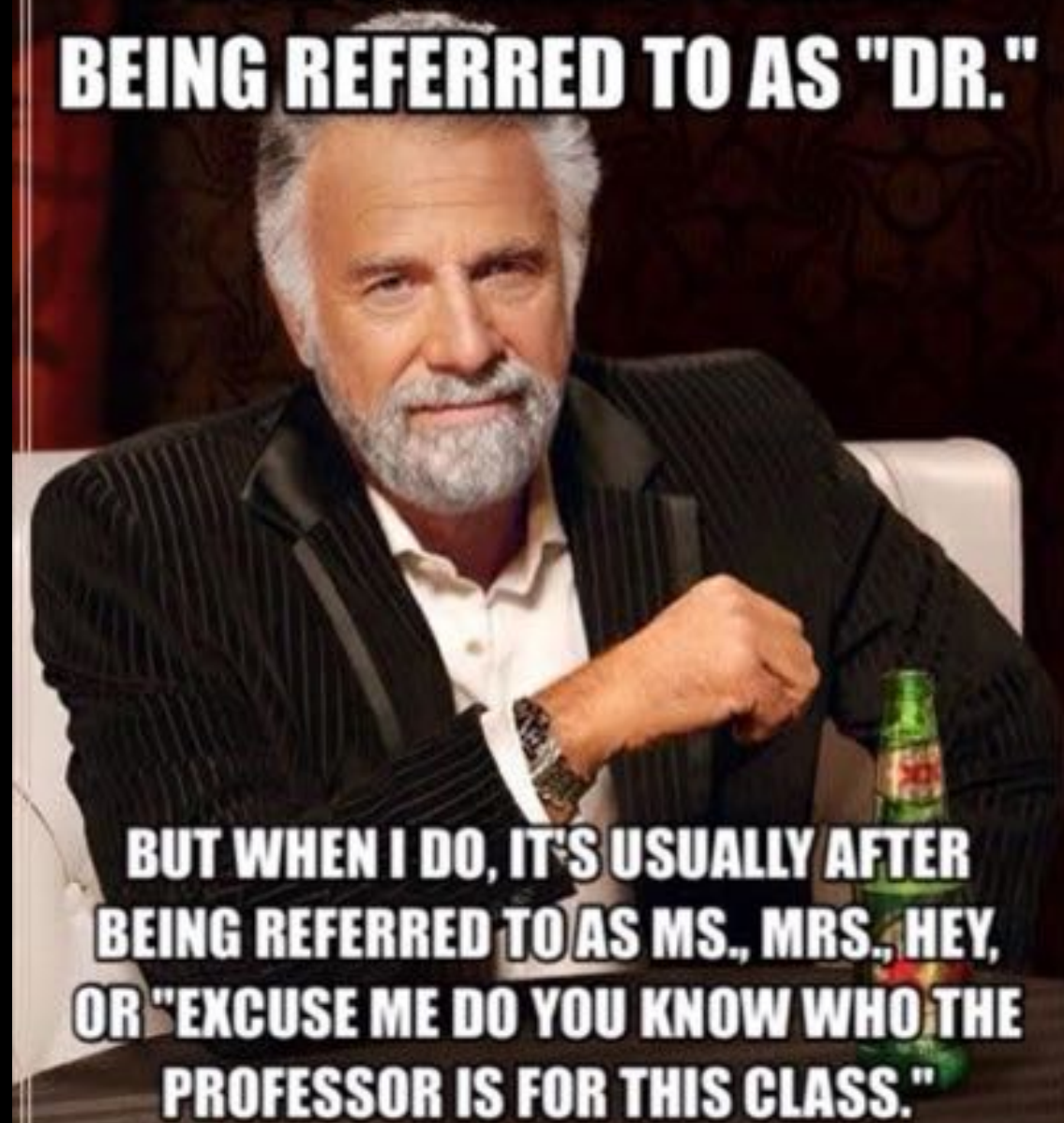
Course Details

- The course syllabus is on Moodle. Check there for full details.

IS(H) Schedule

- Lecture Friday 10:05-11:55
  - Room: Adam Smith Building 1115
- Lab Friday 1:05 - 3:55
  - Level 3 Computing Lab

Lab Groups

- The lab is divided into three groups.
  - 1:00: For people with ID numbers XXXX
  - 2:00: For people with ID numbers XXXX
  - 3:00: For people with ID numbers XXXX
  - If you can't make the right lab time, just turn up to the other time
    - Preference will be given to students attending the correct group

IS(H)

- Mobile phones allowed for PI questions only
- Laptops are allowed
- Recording lectures is allowed

Recording Lectures

- All lectures will be recorded using the University's lecture recording system
  - We will also try to capture discussions.

IS(H) Topics

- Visual Design
- Philosophy of Interaction
- Human Element of Interaction
- Designing Interfaces
- Model User Interaction
- Implementing User Interfaces
- Evaluation Techniques

Text Books and Reading

- All readings are available through Moodle or the University Library
    - Designing with the Mind in Mind, Jeff Johnson
    - Human Computer Interaction, Scott MacKenzie
    - The Design of Everyday Things, Don Norman
    - Visible Usability, Tania Schlatter Deborah Levinson
    - Where the Action Is, Paul Dourish
    - Digital Ethnography,
    - Quantifying the User Experience

Academic Honesty

- The School has clear policies for academic honesty, if you've forgotten this is available on Moodle
- This course depends on discussion and creativity, so collaboration is encouraged, but assignments must be completed individually
- It is your responsibility to be familiar with the policy, but if you are unsure email me

Coursework

- 20% of your total mark
- Hand in times are at 4:30 on the due date
- No questions will be accepted two days before assignments are due

Peer Instruction

- 10% of your total grade will be based on your participation in peer instruction activities. This will include:

- Quizzes during lectures to review reading. You will receive 1 point for every correct answer you provide.

- Problem Solving during lectures to break down course material. You will receive 1 point for every answer (correct or incorrect) you provide.

- In order to receive full marks for this assessment, you need to complete 90% of the total possible points.

- http://learn.gla.ac.uk/yacrs/index.php

Interface Design Assessment

- Group project to develop and implement an interface for interacting with GPX files.
  - Focus on visualization and user experience
- Groups will be assigned at the beginning of week 3
  - Any problems must be worked out amongst the team
  - Failure to attend project workshop labs without excused absences will result in pro-rated credit
- Assessment based on participation in peer review, demonstration, and report.
  - Template for report available on Moodle.
  - Report must not exceed 5 pages.

Usability Challenge

- Start this week, we will have a weekly usability challenge to find terrible interfaces all around us.

- RULES
  - Take a Picture
  - Identify Issue
  - Propose a solution
  - Post it to the Forum!
  - Discuss

  - MyCampus, LTC, and related University systems are excluded because we already know they are terrible.

How to Pass this Class

- Do the readings
- Attend the labs
- Work Hard

You can not pass this class by reading the slides alone.

Meta HCI

- Computing versus Computers
- Interaction versus Interfaces

The Things You See Around You Today Are Not There by Random Chance

- The interfaces familiar with us may seem easy to design
- The new challenges for input are great…

"How the computer sees us" from Physical Computing (image: Tom Igoe, Dan O'Sullivan)

How would you process the signal to detect...

- Pushing a button?

- What human action is required?
  - How do people know what to do?
- How do you turn this action into control?
  - Continuous signal must translate into states.
- How do you make control feel good?
  - What feedback is required?

How would you process the signal to detect…

- Performing a gesture with a wrist-worn device?

- What human action is required?
  - How do people know what to do?
- How do you turn this action into control?
  - Continuous signal must translate into states.
- How do you make control feel good?
  - What feedback is required?

How would you process the signal to detect...

- Thinking a thought?

What is Ethnography

- the scientific description of peoples and cultures with their customs, habits, and mutual differences.
  - Direct observation, participant observation, covert observation
  - Interview, Survey

Ethnography in HCI

- Putting human interaction under empirical analysis
  - How are the interactions that we create accounts of reality?
  - How does observing human behaviour help us makes sense of the things we create?

The Importance of Ethnography in HCI

- Social Actions (and interactions with technology) are embedded in a context
- The minutiae of everyday life is a crucial part of that context
  - How is orderly conduct achieved?
  - How does technology change this when interaction is mediated?
  - What norms and standards does technology lack?
  - How does technology break the physicality of things we expect? (Shoogle)

Embodied Interaction

- Smooth interaction exploits a sense of familiarity
- Embodied phenomena are ones we encounter directly in the physical world rather than abstractly
- These interactions occur in a time and place

Questions?
Comments?
Concerns?

Peer Instruction

This class will be a little different…

- Reading is assigned before the lecture
- Each lecture begins with a quiz on the reading
  - This is worth 10% of your marks in this course
  - You get one point for every correct answer
- Then we'll work through problems from the reading
  - You get one point for every answer
- The end of each lecture will be a chance to provide feedback and ask questions
  - We'll go over this in the following lecture

YACRS Round Up