Autumn Ceilidh

🍂 You're Invited: Autumn Ceilidh! 12/11/25 💃🕺

You're invited to our upcoming **Autumn Ceilidh**, hosted by Hoppers! 🍂

Whether it's your first ceilidh or you're a seasoned expert, everyone is welcome. Come along for an evening of fun, dancing and good company!

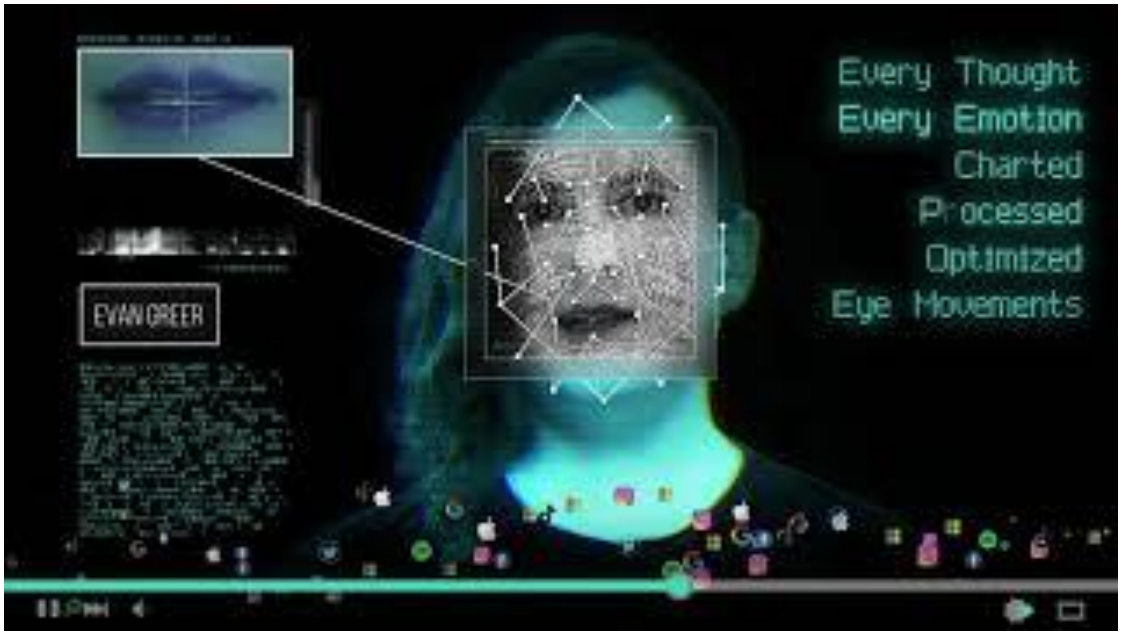
📅 **When:** Thursday 12th November, 19:00–21:00
📍 **Where:** Informatics Forum
🎟️ **Tickets:** Just £5 each!

There will be **live music, refreshments and plenty of dancing**, so bring your friends and get ready for a fantastic evening!

Get your tickets here:
https://www.epay.ed.ac.uk/product-catalogue/college-of-science-and-engineering/school-of-informatics/miscellaneous/informatics-ceilidh-2026

We hope to see lots of you there!

Love,
Hoppers



Surveillance Capitalism. Evan Greer

Slide 1:

Informatics 1

Critical Skills & Practices

INF1-CRISP (INFR07003)

Week 8, Lecture 1

Slides: https://f.ast.io/crisp8.1

QR

Attendance

Slide 3: **This week**

👉 **Monday:** Informatics as a Profession

Tuesday: Writing & Communication (Sarah Immel)

Thursday: Human Computer Interaction (Alex Gillespie)

Slide 4: **Today**

Describe Informatics as a School, subject, and profession

(Learning Outcome 1)

Informatics as a:

1. Subject
2. Profession
3. School

Slide 5: **American Association of Computing Machinery (ACM)**

Alongside IEEE, ACM is a guiding body for many in computing and software engineering.

Software engineering:

- Systematic disciplined and quantifiable approach to developing, operating and maintaining software
- And software is abstract, complex, changeable and embedded within wider social and technical systems.

Software Engineering Professional practitioners: technical knowledge, disciplined methods, communication, teamwork, quality assurance, project awareness and ethical responsibility *not just programming ability*.

1. Informatics as a subject

Poll

What does Informatics mean for you?

1. Writing code (e.g., software development)
2. R&D in software systems and networks
3. R&D in hardware (e.g., devices)
4. R&D in data science and AI
5. Cyber security and cryptography
6. Robotics
7. Theory (mathematics, algorithms, formal logic, programming languages, etc.)
8. Designing applications, systems, hardware (e.g., HCI, UI/product design)
9. Studying technology in society
10. Something else

Your Wooclap question will appear here

1. Install the **Chrome** or **Firefox** extension 🧩
2. Click on “Add a Wooclap vote” and make sure you are logged into your Wooclap account 👨‍💻
3. Ensure you are in **presentation mode** on Google Slides 🖥️

wooclap

Slide 9: Scale, diversity and complexity in Informatics

e.g. Using Uber

What needs to happen for you to get somewhere?

What are the core technical/systems elements?

Your Wooclap question will appear here

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wooclap

Slide 11: Scale, diversity and complexity in Informatics

e.g. Uber: what needs to happen for you to get somewhere?

Maps	→	Data
Routing	→	Algorithms
App/UI	→	Software
Driver ratings	→	HCI & Trust
Pricing	→	Economics
Privacy	→	Ethics

Slide 12: Scale, diversity and complexity in Informatics

e.g. What needs to happen for you to retrieve information from Wikipedia?

Information	→	Data structures
Knowledge search	→	Algorithms
Wiki platform	→	Software
User/community-driven	→	HCI & Trust
Funding	→	Economics
Verification	→	Governance

Slide 13: **Scale, diversity and complexity in Informatics**

e.g. What needs to happen for you to retrieve information from Wikipedia?

Is Wikipedia a technology, a library, a community, or a social institution?

Hint: the answer illustrates the scale, diversity and complexity of informatics

Informatics is an inherently **interdisciplinary subject**.

It involves the understanding of **technical areas**, the **organisation and communication of information**, **human capacities**, and how we **work** (+ **live**) **together**.

1. Informatics as a profession

PROFILE - Professor Helen Hastie
Professor of Human-Robot Interaction, Head of School of Informatics

Areas
Robotics, computer science, cognitive science, linguistics and psychology

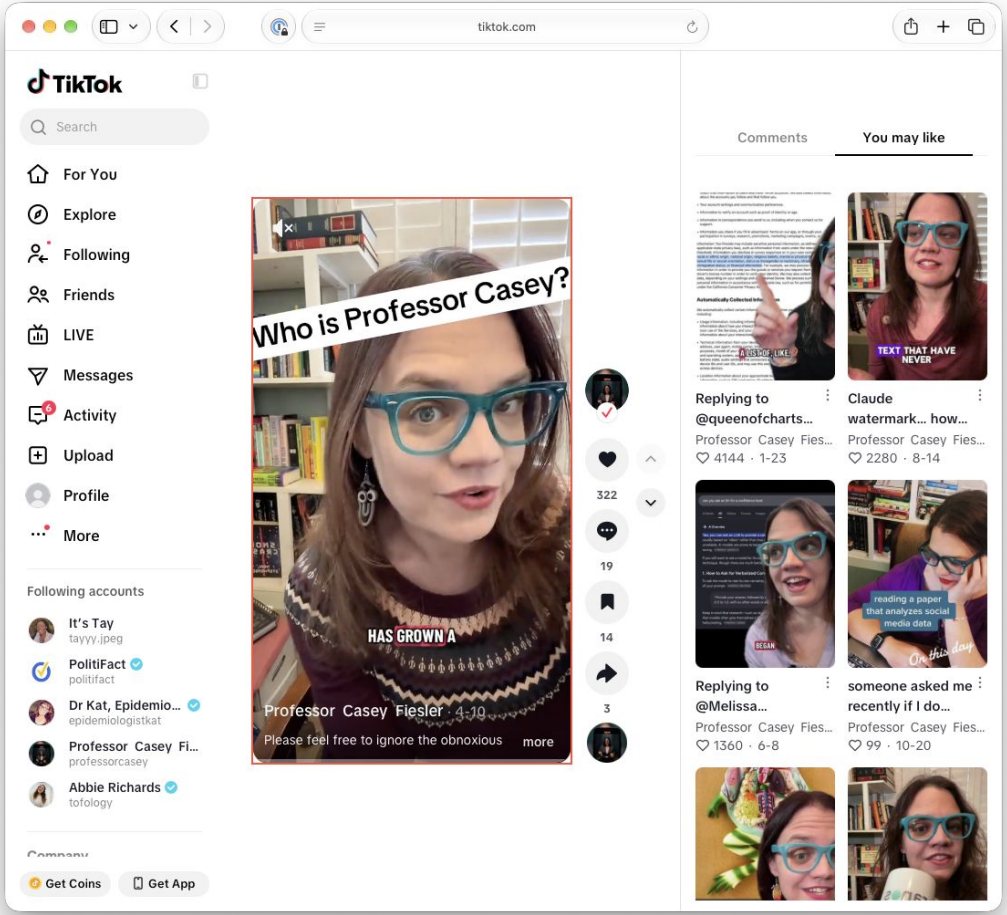
Research
Communication with remote autonomous systems and robots in hazardous environments; natural and trustworthy collaboration; AI Safety

Past Roles
Heriot-Watt University
Advanced Technology Lab, Lockheed Martin, USA
AT&T Research Labs, USA.

Education
PhD Centre of Speech Technology Research (UoE)
MS computational linguistics (Georgetown Univ.)
MA Linguistics in 1995 (UoE)



PROFILE - Professor Casey Fiesler



What does an Informatics professional do?

An informatician’s job:
enable information to move between people, machines, organisations, and society.

This involves:
scientists, **engineers**, **designers**, **analysts** and **ethicists**

Slide 21: Core practices

	Questions	Typical Activities	Example Careers
Scientist	How does intelligence work? What patterns exist in data? What can be computed?	Investigates phenomena, develops theories, analyses data, advances knowledge	AI Researcher, Data Scientist, Cognitive Scientist
Engineer	How can we build reliable computational systems?	Develops apps, networks, robots, and secure systems	Software Engineer, Security Engineer, Cloud Architect
Designer	How should technology fit human needs and experiences?	Creates interfaces, user experiences, and new products and services	UX Designer, Design Informatician, Service Designer
Analyst	What can information tell us about complex systems?	Explains markets, organisations, and social behaviour using data	Data Analyst, Policy Analyst, Health Informatician
Ethicist / social scientist	Should we build it? Who benefits? Who is harmed?	Examines consequences, fairness, accountability, and governance	AI Governance Specialist, Responsible AI Consultant, Digital Policy Researcher

An informatician is not one profession, but a **family of professions** united by a common concern:

understanding and shaping information, computation, people, and society.

Slide 23: Example specialisms

Specialism	Example activities
Health Informatics	Electronic health records, clinical decision support, healthcare analytics
Bioinformatics	Genomics, protein analysis, computational biology
Social Informatics	Studying technology in society, digital inequality/inclusion, AI ethics, governance
Design Informatics	HCI, designing data-driven products and experiences, critical and speculative design
Educational Informatics	Learning analytics, educational technologies
AI and Data Science	Building and evaluating machine learning systems
Cybersecurity	Information security, threat intelligence, security operations, cryptography, digital forensics

Slide 24: **Professional Practice**

Informaticians are responsible use of specialist knowledge on **behalf of people** with obligations to consider:

- public benefit
- safety
- privacy
- security
- fairness
- accessibility, and
- the wider effects of technical decisions.

3. Informatics as a School

Slide 26: School of Informatics: Institutes

Institute	Focus
Institute for Machine Learning (IML)	Machine learning, AI, data science, statistical modelling, biomedical informatics.
Institute of Language, Cognition and Computation (ILCC)	Natural language processing, computational linguistics, cognitive science, language technologies.
Laboratory for Foundations of Computer Science (LFCS)	Algorithms, programming languages, logic, formal verification, security, quantum computing, theoretical computer science.
Institute for Computing Systems Architecture (ICSA)	Computer systems, compilers, operating systems, hardware architecture, networking, distributed systems.
Institute of Perception, Action and Behaviour (IPAB)	Robotics, computer vision, machine perception, autonomous systems, computational neuroscience.
Artificial Intelligence and its Applications Institute (AIAI)	Applied AI, knowledge representation, reasoning systems, industry-facing AI applications.

Slide 27: School of Informatics: Institutes

NB. Design Informatics, Centre for Speech Technology Research (CSTR)

Slide 28: School of Informatics

What?	*Area*
Think	Laboratory for Foundations of Computer Science (LFCS)
Build	Institute for Computing Systems Architecture (ICSA)
Learn	Institute for Machine Learning (IML), Artificial Intelligence and its Applications Institute (AIAI)
Understand People	Institute of Language, Cognition and Computation (ILCC), Institute of Perception, Action and Behaviour (IPAB)
Design Technology	Design Informatics, ILCC→HCI

Slide 29: School of Informatics: Research Themes

Theme	Topics
Data Science & AI	Machine learning, generative AI, statistics, decision-making.
Language, Interaction & Robotics	NLP, speech technology, conversational AI, robotics, HRI.
Foundations of Computation	Algorithms, complexity, logic, verification, programming languages.
Computer Systems	Hardware, operating systems, networking, cloud computing, compilers.
Security & Privacy	Cybersecurity, cryptography, usable security, system security.
Human-Computer Interaction	UX, accessibility, interaction design, collaborative systems.
Computational Cognitive Science	Human learning, reasoning, perception, decision making.
Data Science & Visualisation	Analytics, visualisation, knowledge discovery.

Teaching Staff

Lecturers



James Garforth



Persie Rolley-Parnell



Alex Taylor

Teaching Assistants (TAs)



Alex Gillespie



Sarah Immel



Kimberly Paradis

Important Links

Open Course: https://opencourse.inf.ed.ac.uk/inf1-crisp

EdStem: https://edstem.org/eu/courses/3351/discussion

Course Catalogue: http://www.drps.ed.ac.uk/26-27/dpt/cxinfr07003.htm

InfPALS: https://infpals.github.io/index.html

Contact us?

- If you have course specific concerns, use EdStem. Ask a question anonymously if you're more comfortable with that (though not anonymous to the teaching staff).
  - EdStem CriSP Link
- If you have personal concerns, use the CriSP email address (don't forget to introduce yourself in the email).
- It's very unlikely we will reply to you outside of our working hours. We will do our best to reply within 48 hours (usually sooner) not counting weekends.
- If there is an emergency, the phone numbers and email addresses for University security are on the back of student cards.
- If someone is in danger of harm, call the emergency services on 999.