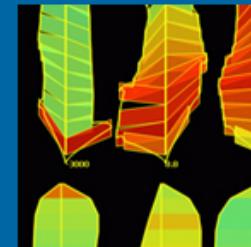
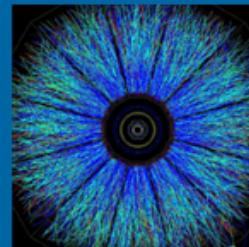
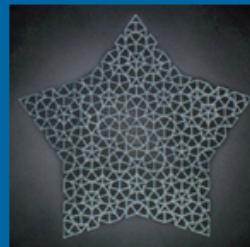
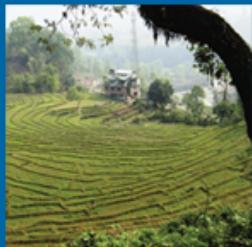




Swansea University
Prifysgol Abertawe

CS-130

Legal Issues in Computing - Professionalism in Computing



Learning Goals

What is professionalism in Computing?

Who are the major professional bodies in computing and what are their codes of conduct about?

Why does it matter that we are professional as a collective?

What issues exist around equal access in computing?

What are the practical and ethical considerations when thinking about Public Interest Disclosures (whistleblowing)?

What do you understand professional behaviour to be?



Why Behave Professionally?

We (Computer Scientists) are judged internally (invisibly) by it as individuals

- All members of a group (including you) are judged by outsiders

Professional behaviour enhances prestige of group, and you by association

Doctors, nurses and lawyers are generally respected in society

- Current standing of journalists and politicians are a decent counter example



Business ▶ Policy

One-quarter of UK.gov IT projects at high risk of failure

Digital borders, digital tax and raft of MoJ projects singled out

By Kat Hall 18 Jul 2017 at 15:03

43 SHARE ▾



One-quarter of the UK government's major IT programmes worth a total lifetime cost of £8bn are at high risk of failure, according to a *Register* analysis of the major project watchdog's annual report of 143 government programmes worth over £455bn.

The Infrastructure Projects Authority report rated 39 ICT projects worth £18.6bn, with nine of those rated amber/red. That means successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas and that urgent action is needed to address those problems.

A number of high-profile programmes were on the list, including HMRC's

Most read



'Urgent data corruption issue' destroys filesystems in Linux 4.14



Permissionless data slurping: Why Google's latest bombshell matters



Wait, did Oracle tip off world to Google's creepy always-on location tracking in Android?



London mayor: Self-driving cars? Not without jacked-up taxes, you don't!



Uber: Hackers stole 57m passengers, drivers' info. We also bribed the thieves \$100k to STFU

Wikipedia Founder Jimmy Wales Accuses David Cameron Of 'Technological Incompetence' over Encryption Bill

The Huffington Post UK | By Paul Vale [✉](#) [Twitter](#) [Like](#)

Posted: 21/07/2015 22:37 BST | Updated: 22/07/2015 09:59 BST



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The founder of Wikipedia accused David Cameron of “technological incompetence” on Tuesday, telling the British Prime Minister the idea of banning encryption was “just nonsense.”

Speaking on HuffPost Live in New York, Jimmy Wales responded to a question about the British government’s push to gain access to encrypted sites for reasons of security.

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Question Time: Watch Victoria Coren Mitchell Offer A Radical Solution To The Housing Crisis



Bercow Effortlessly Slaps Down Veteran MP's Attempt To Embarrass Him



George Galloway's Latest Video Is The Most Sinister Thing Ever

WhatsApp reportedly refused to build an encryption backdoor for the UK government



Rob Price



⌚ Sep. 20, 2017, 3:46 PM

1,132



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It sounds like messaging app WhatsApp isn't backing down on its commitment to encryption.

According to a report from [Sky News](#), the British government asked the Facebook-owned messaging app to build a way to give it access to encrypted messages, but it refused.

Encryption is a frequent hot topic in discussions around terrorism and extremism in the UK, America, and elsewhere in the world.



Britain's Prime Minister Theresa May. Ben Stansall - WPA Pool/Getty Images

Professional Bodies

UK: *British Computer Society (BCS)*

US: *Association for Computing Machinery (ACM)*

Institute of Electrical and Electronics Engineers (IEEE)

Bodies provide a range of benefits to members

- Databases of papers and (surprisingly good) professional magazines
- Training courses
- Conferences
- Some employees insist on having, and maintaining, membership

UK IT Industry Awards 2017

Congratulations to all the winners and highly commended.

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Cyber security
Our vision is a world properly protected from cyber threat



Who we are

- Making IT good for society
- BCS 60th anniversary
- About BCS
- Academy of Computing
- Licensing body (CITP)
- Vacancies
- ISO Certifications

Key topics

- Careers and skills
- Computing education
- Green IT
- Health and care
- Learning and development
- Professional development
- Security, data, privacy

Policy and media

- Policy hub
- Press office
- Equality, diversity and inclusion
- Digital youth
- Code of conduct
- LGBT+ History Month

Publishing and editorial

- BCS books
- Blogs and videos
- Interviews
- ITNOW
- iTunes U
- Learned publishing
- News
- Book reviews
- Subject area articles

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- Want to be a writer?

Popular

- Cyber security
- Digital IT Apprenticeships
- Business analysis certifications
- HEQ exam papers and examiner reports
- Software testing certifications

What is does and does not involve?

You do not take responsibility for things over which you have no control

You must recognise where you do and do not have control and influence

You don't need to be selfless and abandon self-interest

You must weigh up personal gain against effects on others within and outside immediate circumstances

BCS – Interesting Bits

This code of conduct:

- Sets out the professional standards required by BCS as a condition of membership
- Applies to all members, irrespective of their membership grade, the role they fulfil, or the jurisdiction where they are employed or discharge their contractual obligations
- Governs the conduct of the individual, not the nature of the business or ethics or any Relevant Authority rules

Why would a job want you to be a member of a professional body?



Professional membership and jobs

Some jobs ask that applicants be a member of a professional body in order to

- Ensure you have no serious criminal convictions
- Ensure you can be trusted to behave professionally
- Show that you are engaged with the subject area and aim to continue growing your skills

From the BCS: Competence and Integrity

You shall:

- a. only undertake to do work or provide a service that is within your professional competence*
- b. NOT claim any level of competence that you do not possess.*
- c. develop your professional knowledge, skills and competence on a continuing basis, maintaining awareness of technological developments, procedures, and standards that are relevant to your field.*
- d. ensure that you have the knowledge and understanding of Legislation and that you comply with such Legislation, in carrying out your professional responsibilities.*
- f. avoid injuring others, their property, reputation, or employment by false or malicious or negligent action or inaction*

Good Conduct

More than just following the rules, this is about being a good citizen

- A major theme in all professional bodies material

It goes beyond honest and trustworthy work and demands that you give consideration to the consequences of your actions

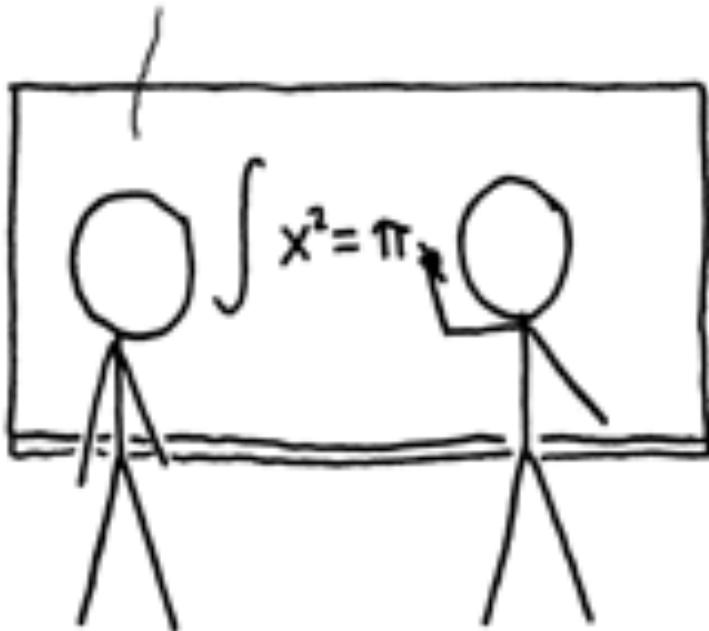
- The opposite of a “caveat emptor” attitude
- The benefit is a more broadly respectful society
- Think back to quotes in the opening lecture from lawmakers dismissing “geeks” – would they dismiss lawyers or doctors?

From the BCS: Public Interest

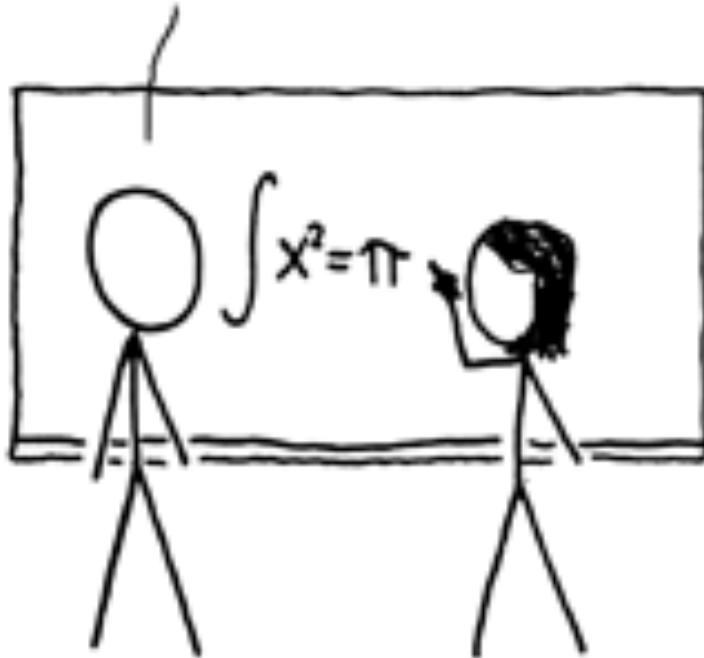
You shall:

- a. have due regard for public health, privacy, security and wellbeing of others and the environment*
- b. have due regard for the legitimate rights of Third Parties*
- c. conduct your professional activities without discrimination on the grounds of sex, sexual orientation, marital status, nationality, colour, race, ethnic origin, religion, age or disability, or of any other condition or requirement*
- d. promote equal access to the benefits of IT and seek to promote the inclusion of all sectors in society wherever opportunities arise*

WOW, YOU
SUCK AT MATH.



WOW, GIRLS
SUCK AT MATH.



Promoting Equal Access in Computing

Why is computing as a field homogenous?

- Discouragement systematic after the age of 12 (TechnoCamps work at Swansea supports this!)
- Lack of role models in the field? (Only an issue for some)
- Cultural attitudes are still an issue in some work places (Widespread)

Some common misconceptions

- Men are genetically better at it? – Not supported by grade averages or blind competence tests (but supported by **non-blind ones** which is an issue...)
- Women don't like computers? – Only after the age of 12 does this creep in
- Positive discrimination in hiring? – This is illegal in the UK but targeted job advertisement is legal

Public Interest and The Public Interest Disclosure Act 1998: “Whistle Blowing”

Breaking a contract's ***non-disclosure agreement (NDA)*** to reveal bad or illegal behaviour is called whistleblowing

- You can use a ***Public Interest Defence*** in court if you are sued for doing this i.e. it was done with the welfare of the general public in mind
 - Separate to going to the police - you can never be sued (successfully) for reporting crimes to the police

The PIDA1998 is to protect you from *repercussions* from employers through employment contracts or otherwise if you disclose illegal or dangerous behaviour

- Disclosure might be done through the press (anonymously or not) with Public Interest in mind
- Other ways – Social media, blogs, FB, Twitter etc. Risk of revealing identity.

CAUTION

**THIS SIGN HAS
SHARP EDGES**

DO NOT TOUCH THE EDGES OF THIS SIGN



ALSO, THE BRIDGE IS OUT AHEAD



Public Interest Disclosure: Health and safety

One of the simplest examples of the necessity of whistleblowing or speaking out in the work place

Health and safety is still relevant to your daily life!

Even in offices simple issues (cables everywhere, broken fire alarms, unsafe desks)

Maybe you think it's excessive now

- Driven by media tendency to blame red tape and poor public perception

How dangerous were workplaces before the advent of health and safety legislation and nationalised healthcare?

Showing due care and diligence

Probably your best defence if things are escalated

Can you show how you have acted following a professional body's Code of Conduct?

But still, even if you can show it. whistleblowing often comes with a cost...

NHS whistleblowers 'gagged and blacklisted', says petition group

Doctors, staff and patients criticise Care Quality Commission and call for radical change in health service regulation



This article is 12 months old



Press Association

Tuesday 6 December
2016 08.46 GMT



"Many patients, bereaved relatives and whistleblowers are frustrated that disclosures to the CQC have not resulted in change," the group said. Photograph: Oli Scarff/Getty

NHS whistleblowers face being “fired, gagged and blacklisted” while disclosures go uninvestigated owing to the healthcare regulator’s lack of powers and resources, a group of doctors, staff and patients has warned.

The [Care Quality Commission \(CQC\)](#) was criticised for being “low value” by the group, which has called for radical change in how the health service is regulated.

In a letter to the Times, the group, which has exposed huge failings, said the CQC had failed to detect poor care and governance since it replaced the Healthcare Commission in 2009. It cited an example where an inspection of a foundation trust cost £273,900 but failed to spot hundreds of uninvestigated deaths.

Case Study 1 – Brett McDanel

1. Employed at Tornado Development Inc, an ISP which offered “secure” web mail
2. Discovered it wasn’t secure and reported to employers
3. Left, and after six months discovered flaws hadn’t been fixed
4. Emailed 5,500 users and directed them to his website
5. ISP deleted emails (without users’ permission) and made criminal complaint

Case Study 2 – Katherine Gunn

1. A UK Government civil servant, translating at GCHQ
2. Was asked to translate diplomatic bugging for the NSA of UN Security Council Members
3. Reported to the press that UN Security Council members were being bugged
4. Bugging done with the intent of ensuring support for the Iraq War

Bugging was illegal under UN Vienna Conventions

Results

McDanel convicted, spent time in jail

- Appealed after release – conviction overturned
- The government charged and convicted McDanel under the theory that the e-mailed warning itself violated the anti-hacking Computer Fraud and Abuse Act because it “impaired the integrity” of the vulnerable system.*

Gunn sacked and prosecuted under the Official Secrets Act

- Charges dropped at the start of the trial
- Some suggestion that this was only because of clever work by her defence team that would have forced more sensitive / embarrassing data for the Government into the public domain

What can you do in order to show due care and diligence?



Learning Goals

What is professionalism in Computing?

Conducting yourself with awareness and respect of others interests

Who are the major professional bodies in computing and what are their codes of conduct about?

BCS and ACM/IEEE – acting in the public interest

Why does it matter that we are professional as a collective?

Politically and financially relevant

What issues exist around equal access in computing?

Gender and racial discrimination in business hiring, incorrect beliefs

What are the practical and ethical considerations when thinking about Public Interest Disclosures (whistleblowing)?

Risk of causing harm to others and legal/illegal retaliation