

ADP I & K Skills: Information Security Research & Contributions to the Information Security Profession and Professional Development

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You will be muted during the webinar.



There will be the opportunity to ask the speakers questions at the end. You can type these to the moderator throughout the webinar and we will ask the panellists on your behalf at the end of the talks.



If you experience any problems please bring it to our attention through the 'raise hand' icon and we will do our best to help or email support@ciisec.org

- Introductions
- Skill area I – Cyber and Information Security Research
 - I1 – Research
 - I2 – Applied Research
- Skill area K – Contributions to the Cyber and Information Security Profession and Professional Development
 - K1 – Contributions to the Community
 - K2 – Contributions to the IS Profession
 - K3 – Professional Development

Who am I?

- Maths → computer science → formal methods/reliable systems
- Comsec R&D
- An escaped academic
- Consultancy
- Information security manager (public sector)

...and generalist computer scientist and software engineer

- conducts original investigation in order to gain knowledge and understanding relating to cyber and information security.
- defines research goals and generates **original and worthwhile ideas in cyber and information security**.
- **writes or presents papers**, either **internally or externally**, on the results of research.
- contributes to the development of the employing organisation's cyber and information security research policy and participates in or supervises the work of cyber and information security research functions.
- **develops new or improved models or theories of cyber and information security**.
- develops **new cryptographic algorithms**.
- in the cyber and information security field, uses existing knowledge in experimental development to produce new or substantially improved devices, products and processes or **advance understanding of behavioural response to security controls**.
- develops new methods of **obtaining and securing evidence** from networks and devices.
- **awareness of relevant sources and how to access them**.

- vulnerability research and discovery, leading to the development of exploits, reverse engineering and researching mitigation bypasses.
- cryptographic research leading to the assessment of existing algorithms.
- in the cyber and information security field, uses existing knowledge in experimental development to produce new or substantially improved devices, products and processes.
- develops practical application of new methods of obtaining and securing evidence from networks and devices.

K1 Contributions to the community

undertakes activity to broaden awareness, prevention and knowledge of cyber and information security issues, including the risks from social media use, in the wider community – e.g. moderating sessions at schools, community centres, etc.

Examples:

- One-off talks at schools, colleges and universities welcome visiting speakers
- Mentoring
- Clear, balanced, correct input to the media
- Law enforcement (prevent, protect, prepare, pursue)

K2 Contributions to the IS profession

- undertakes voluntary roles within industry forums or professional bodies.
- presents sessions on cyber and information security, either within the organisation or at conferences

Examples:

- Professional bodies cannot function without volunteers from within
- Standards bodies
- These sessions!

Look around!

- What interests you? Which bit of infosec sparks your interest?
- What interests outside of infosec might be complementary?
- What problems have you solved / challenges overcome?

...but know when and how to say “no”

“Mandatory”

Takes appropriate and timely action to develop and maintain personal cyber and information security knowledge and expertise.

- *All* professional bodies expect CPD
- *CIISec* (and *UKCSC*) expect you to document CPD

... but if you only do it because of those expectations, it will be challenging

K3 Professional development

Level 3 Has taken steps within the past year to develop or maintain professional knowledge.

Level 4 Is a member of CIISec or another professional body. Regularly takes steps to improve and update own skills sets. Keeps up to date with relevant technologies. Maintains level of knowledge for professional certifications, accreditations and/or qualifications gained.

Plan...

and look for opportunities

What are you good at now?

What do you need to be good at for the next step(s) of your career?



Noteworthy points:

- Codes of Conduct and Ethics
- Specialist/technical *and* “non-domain” learning (e.g., management)

Questions?

Email phil@green-pike.co.uk

