CyBOK

Foundations and Resources for the Community

Professor Awais Rashid and Professor Steve Schneider

contact@cybok.org
www.cybok.org

Codify ***foundational*** and generally recognised knowledge in cyber security following broad community engagement nationally and internationally

A ***guide*** to the body of knowledge

Focus is on ***established foundation*** of the subject (not on everything that has ever been written or on still-emerging, nascent, topics)

>115 Experts: Authors, Reviewers, Advisors

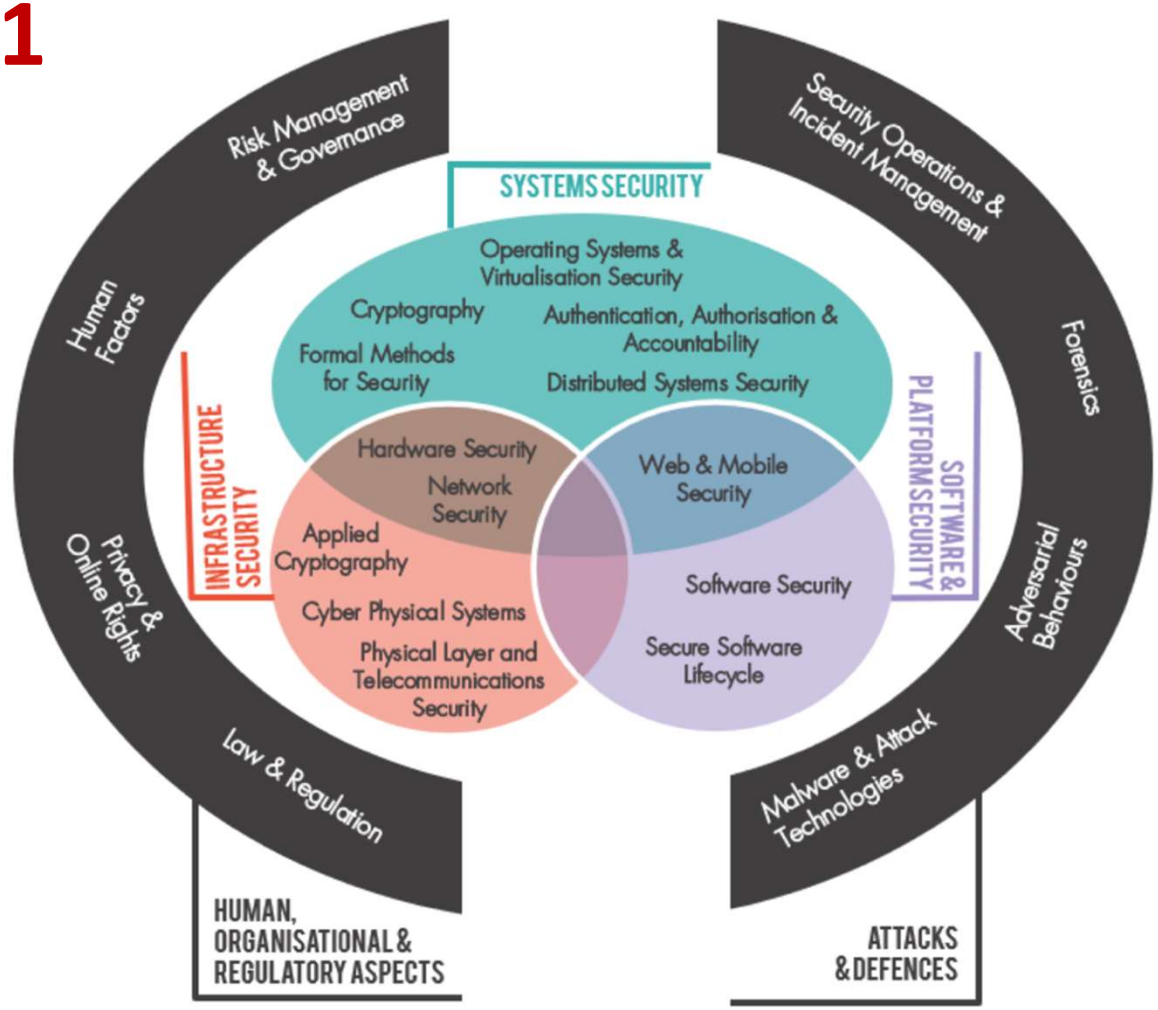
>1000 Pages

>2200 Authoritative sources

>1600 Comments from wider community

>30 Invited talks, panels and keynotes

CyBOK 1.1


Risk Management & Governance
Human Factors
Privacy & Online Rights
Law & Regulation
Security Operations & Incident Management
Forensics
Adversarial Behaviours
Malware & Attack Technologies
SYSTEMS SECURITY
Operating Systems & Virtualisation Security
Cryptography
Authentication, Authorisation & Accountability
Formal Methods for Security
Distributed Systems Security
INFRASTRUCTURE SECURITY
Hardware Security
Network Security
Applied Cryptography
Cyber Physical Systems
Physical Layer and Telecommunications Security
SOFTWARE & PLATFORM SECURITY
Web & Mobile Security
Software Security
Secure Software Lifecycle
HUMAN, ORGANISATIONAL & REGULATORY ASPECTS
ATTACKS & DEFENCES

Keeping the Foundations Strong

Open call for proposals to update current KAs or propose new ones: *CyBOK 1.0 -> CyBOK 1.1*

Not just reactive but also proactive: *ongoing development of a process of expert review of subsets of KAs leading to regular refresh*

Pro-actively develop guides that capture practical pathways through CyBOK or emerging knowledge in the community

Supplementing the Foundations

Knowledge Guides: Emerging topics or those that are still developing broadly agreed foundations

- Security and Privacy of AI
- Security Economics

Topic Guides: Practical applications that cut across multiple CyBOK KAs

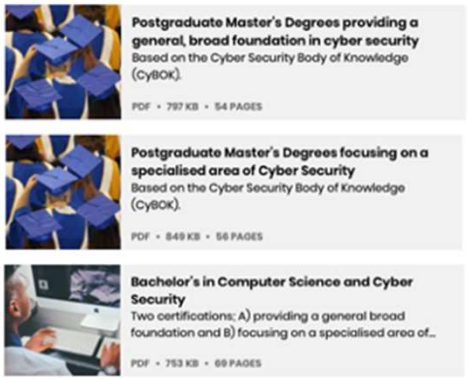
- AI for Security
- *Cloud Security*

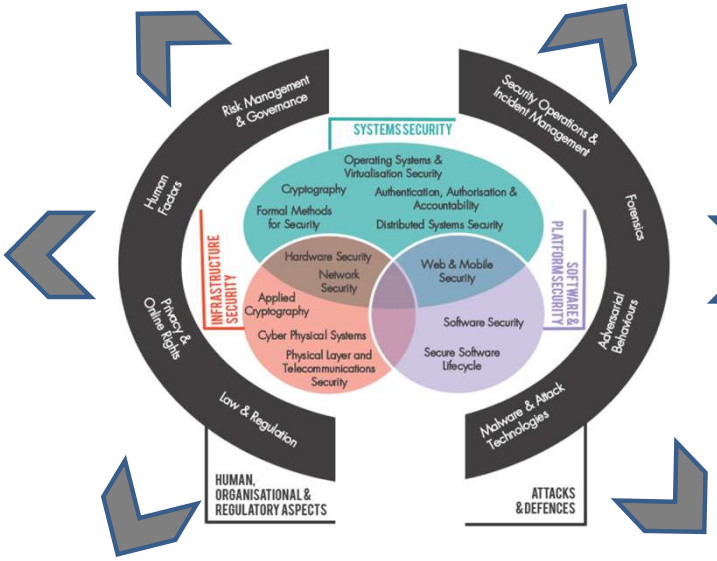
Foundations for …

Design new university or professional training programmes

Contrasting different programmes

Design new certification schemes





Knowledge requirements for job roles

Traceably meeting certification requirements

Benchmarking capacity

Underpinnings for the Profession

CyBOK

UK CYBER SECURITY COUNCIL

Working collaboratively with the Council

Sharing knowledge of CyBOK processes and governance structures

Supporting mappings as qualifications frameworks developed

Develop a strategy for sustainability of CyBOK for the medium to long term

CyBOK – UKCSC Joint Transition Board

Chair: Siân John

Advisor: Ollie Whitehouse

Members: Awais Rashid, Simon Hepburn

Strategic planning and reviewing for CyBOK's transition to the Council over the next 3 years

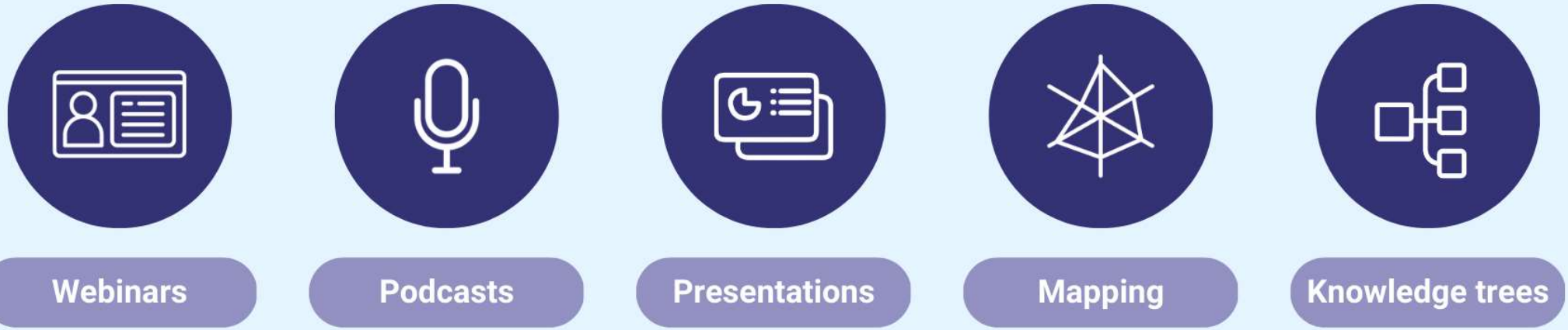
Long term governance, rigour and sustainability

CyBOK

Resources for the Community by the Community

CyBOK resources

Free resources are available for education, training, course development and professional development:

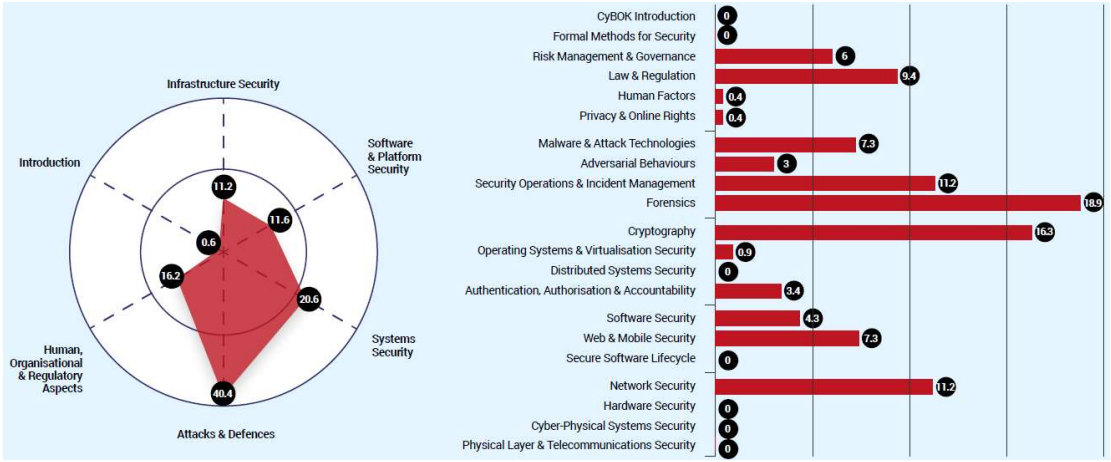


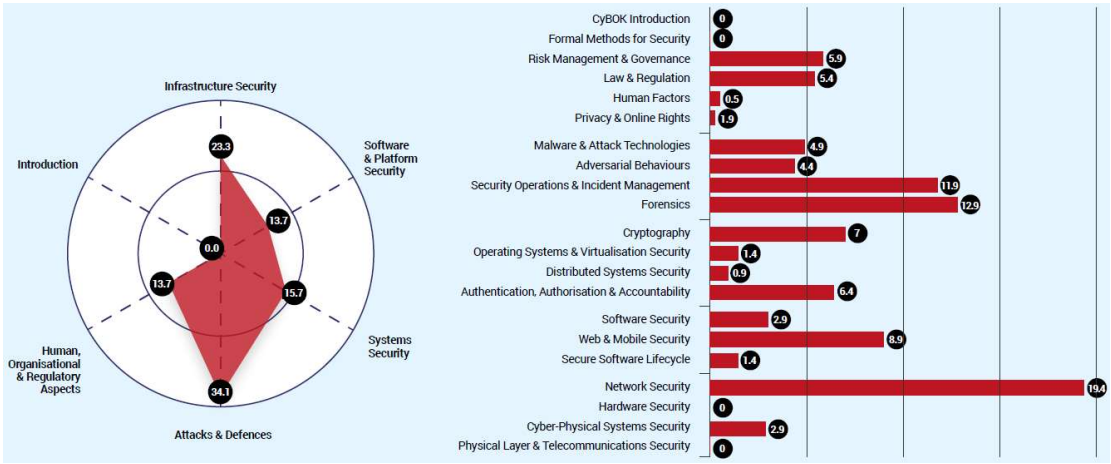
Mapping booklet

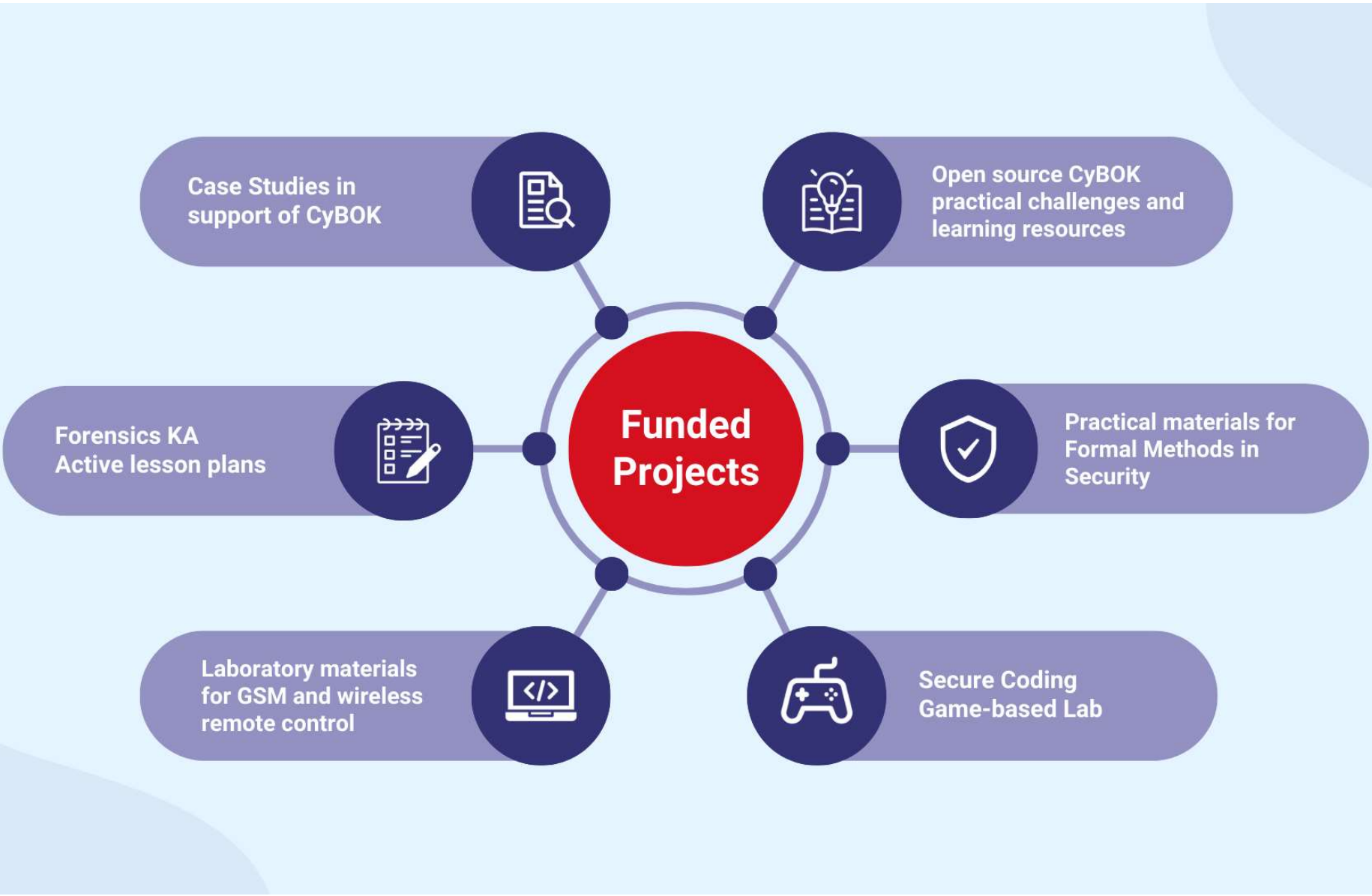
CyBOK

Mapping booklet

- New version coming soon
- Will feature mappings of ~40 university courses
- Opportunity to analyse the data to look at coverage of CyBOK KAs across all courses






Funded Projects
Case Studies in support of CyBOK
Open source CyBOK practical challenges and learning resources
Forensics KA Active lesson plans
Practical materials for Formal Methods in Security
Laboratory materials for GSM and wireless remote control
Secure Coding Game-based Lab

Outreach projects

- Several projects to be funded and will be announced shortly.

- Areas include:
  - Work with school students
  - Work with Local Authority sector
  - New games and visual stories for CyBOK topics

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