Dr Karen Renaud

**Industrial Fellowships
Scheme**

Dr Karen Renaud is a Senior Lecturer in the School of Computing Science at the University of Glasgow. Between 2015 and 2016 she held a Royal Academy of Engineering Industrial Fellowship to collaborate with the Scottish Business Resilience Centre (SBRC) to analyse how cyber security for businesses in Scotland could be improved.

ROYAL
ACADEMY OF
ENGINEERING

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RESEARCH

Hacking, password attacks and various forms of malware are the most common types of cyber threats to personal and business computer users, so keeping information safe is an important concern. Dr Karen Renaud's research interests lie in addressing challenges relating to awareness, accessibility and usability of cyber security.

The key to successful security lies in an easy interaction between people and their devices. With this focus, Dr Renaud's research uncovers novel insights that are required to improve cyber security. The Royal Academy of Engineering Industrial Fellowship enabled her to achieve this while on secondment with the SBRC. Together, they explored the barriers faced by businesses in implementing essential information security practices. Their investigation aimed to identify practical solutions and services to better enable Scottish businesses to thrive.

"I gained a much better insight into the efforts of the Scottish government to support industry in terms of improving their resilience," explains Dr Renaud. "The Fellowship gave me the opportunity to model and explore the reasons why businesses currently do not follow advice given by the Scottish government and other agencies."

IMPACT

This collaboration provided access to a variety of different-sized businesses in Scotland. This enabled Dr Renaud to visit businesses across the country, and directly share research outputs on human-centred security. In doing so, she provided feedback from businesses and helped them to understand why some of their efforts had not been as effective as they could be.

The insights gained from a wide range of businesses and through working with the Scottish government have strongly influenced Dr Renaud's teaching.

"I can now speak with far more authority about what businesses are currently doing and am able to explain the reasons for businesses not implementing measures to secure their information," she explains. "Since I am training the next generation of researchers in this industry, having these insights will make them more realistic about how to improve security in the organisations they will be working with."

PROFESSIONAL DEVELOPMENT

The collaboration has created access to networks that have been a useful resource for Dr Renaud's research. Through advice and support, these connections enable her to make grant applications that clearly demonstrate the ability to meet industry needs. Dr Renaud plans to strengthen these links by continuing to engage with SBRC and consulting on new interventions.

ROYAL ACADEMY OF ENGINEERING INDUSTRIAL FELLOWSHIP SCHEME

The Industrial Fellowship scheme provides an invaluable opportunity for early- to mid-career academics to undertake a collaborative research project in an industrial environment. The scheme aims to strengthen the strategic relationship between the university and the industry host by providing an opportunity to establish or enhance collaborative research between the two parties and enhance the quality of teaching.