

INTERNATIONAL EXCELLENCE FELLOWSHIPS

Experience Report 2022

Name and title of fellow	Prof Karen Renaud
Duration and time of research stay	3/11/2022 – 3/12/2022
Host professor and host institute at KIT	Prof Dr Melanie Volkamer, Department of Economics and Management, KIT

PART 1: Achievement of the objectives of the research stay, and future plans

Please answer the following questions to produce a 1 - 2-page report on your research stay at KIT within the International Excellence Fellowship Program.

- 1. To what extent have the research project objectives laid down in the nomination form been achieved? How did the collaboration proceed with your host institute or research group?**

Please give a short description of the outcomes of your research stay at KIT. How has the cooperation within the host institute or research group developed so far? Did you take part in any scientific or academic events at your host institute or KIT in general? If possible, please mention some notable milestones and joint breakthroughs (e.g. joint publications, project proposals, etc.).

The research stay was delayed due to the pandemic, and the field of cybersecurity is a very swiftly moving field. Indeed, my visit was delayed by 18 months. In the interim, others have published papers about the research we were planning to do during my visit related to password manager choices based on their features. As such, Prof Volkamer and I considered what the most topical and timely topic was that should get my attention while I visited. We decided to focus on end user mental models. These will inform later investigations into password managers and users choice processes with respect to these. As it happens, delaying the password manager study was actually wise, given that one of the most well-known password managers had a breach, leaking many people's credentials. This changes the landscape of password manager choice processes, since we now have to figure out to rebuild trust in the concept of password managers altogether.

I was able to meet with all of Prof Volkamer's PhD candidates and the Post-Doc researchers in her unit, to discuss their research. As a consequence:

- (1) I am working with Fabian Ballreich (one of the PhD candidates) and co-authors on a paper related to encouraging people to report cybersecurity incidents within organisations.
- (2) I met Prof Ingrid Ott, and we plan to find funding to pursue a programme of research that we have discussed.
- (3) Prof Volkamer and I are working on a paper related to cybersecurity mental models, which is essentially an update on a paper we wrote 10 years ago about the same topic.\

- (4) I met with a PhD candidate, Benjamin Behrens, who is writing up his PhD, and provided some advice.
- (5) I met with Philipp Scherzer to discuss the new Cyber Security graduate school.

2. What was the output of your research stay at KIT? Please elaborate on future plans, projects, or other kinds of synergies and cooperation projects.

Please describe how the research stay has helped to further strengthen the cooperation between you and the host institute or research group. Please name specific activities, topics, work plans, if any. Please indicate how the research stay promoted the internationalization strategy of your home institution and KIT in general (e.g. through fostering strategic partnerships or regional research networks, creating synergies and clusters, initiating multidisciplinary research projects).

The University of Strathclyde has a strong internationalization strategy. As such, staff are encouraged to engage in fellowships such as the one offered by KIT.

Prof Volkamer and I have been working together on a wide variety of research projects over the last decade. This visit has strengthened this collaboration and will lead to many future publications (two of which are currently being written), and possible research projects as funding calls appear.

PART 2: Testimonial

Your feedback is very important to us and the next fellows. We would therefore appreciate if you provided a short testimonial to be posted on our website by answering the following questions:

My research field is
Human-Centred Cybersecurity
How my research field is going to affect the world of science?
Researchers in my field attempt to accommodate human frailties and foibles, and to ensure that security solutions are designed with the human in mind (and not only technology).
My main finding / highlight during my research work at KIT was
Spending time discussing research with talented young researchers at KIT, seeing their enthusiasm and being able to assist them. PS. Meeting the other fellows from other parts of the world when we all went for dinner one evening
I have chosen the Karlsruhe Institute of Technology because

Prof Melanie Volkamer is one of the leading lights, globally, in the field of human-centred security, and being able to spend some time in Karlsruhe working with her was mutually beneficial

If you want to, you can give advice to the next fellows. What should they know about Karlsruhe, KIT and the International Excellence Fellowships program?

I would say that this programme is a great one to be affiliated with, because it is so well organised by the international team, because you will meet other researchers, and because Karlsruhe is such a friendly city, within easy reach of Germany's main airport, and also other interesting places to visit.

Please feel free to add any other information you would like to share with us and everybody interested in KIT and the International Excellence Fellowship Program.

Thank you very much for your participation and your feedback!

Declaration

I hereby confirm that the details provided are correct and complete. I also confirm that I acknowledge the [Privacy Policy of KIT](#). In addition, I agree that INTL may contact me for follow-up purposes.

Date: 30/1/2023

Signature Karen Renaud
(a digital signature is sufficient)