

# Empowerment and Ethics at the Edge: the Benefits and Risks of Edge Technologies

The Foundation for Science and Technology event in collaboration with  
the PETRAS National Centre of Excellence

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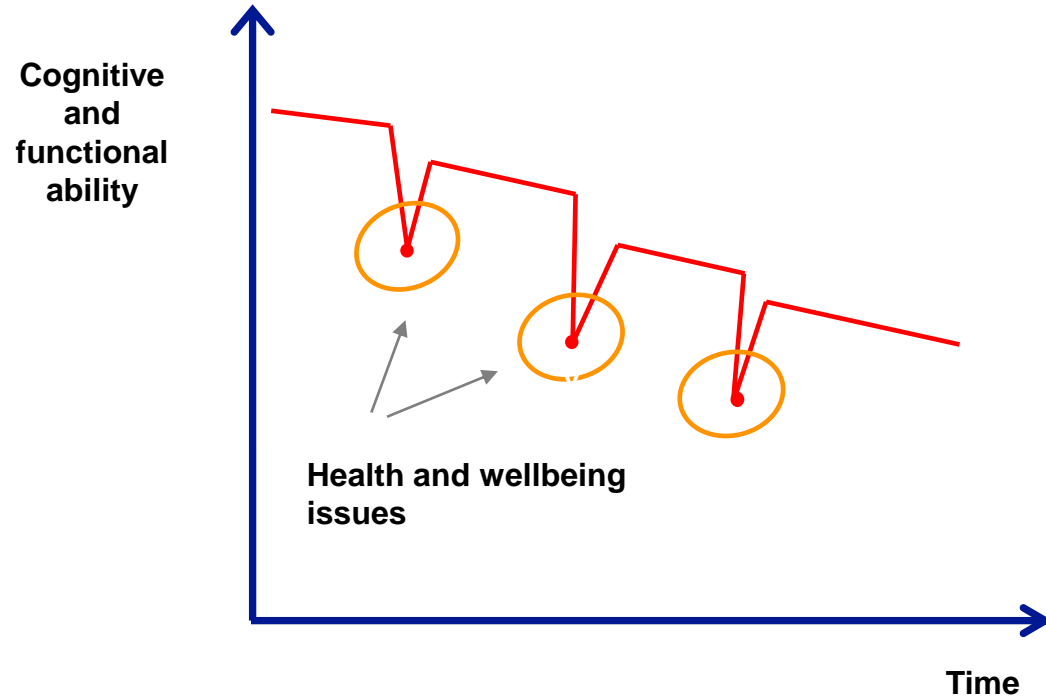
Care Research and Technology Centre  
UK Dementia Research Institute (UK DRI)

**IMPERIAL**



# Dementia care

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- ~22% of unplanned hospital admissions in people with dementia are due to preventable causes.

- People with dementia typically spend £100,000 on the care they need – many spend much more.

- Dementia care can be up to 40% more expensive than standard social care.

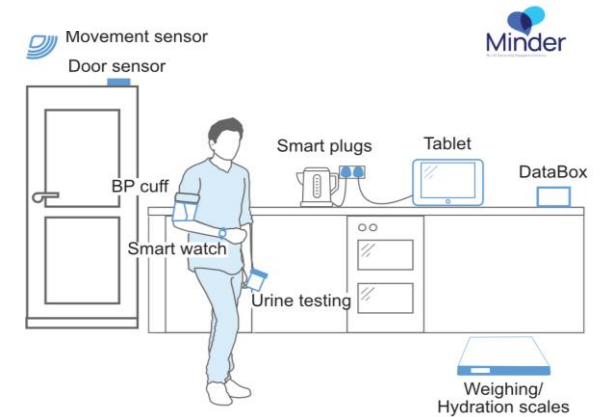
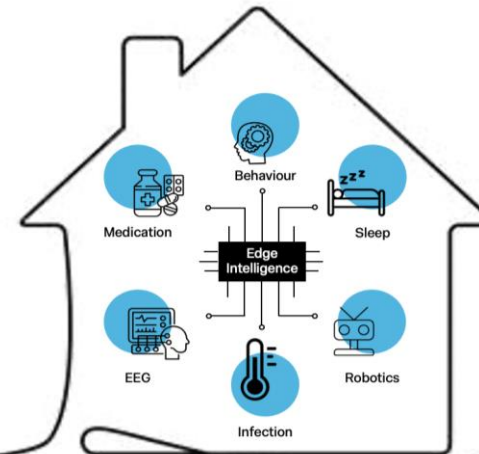
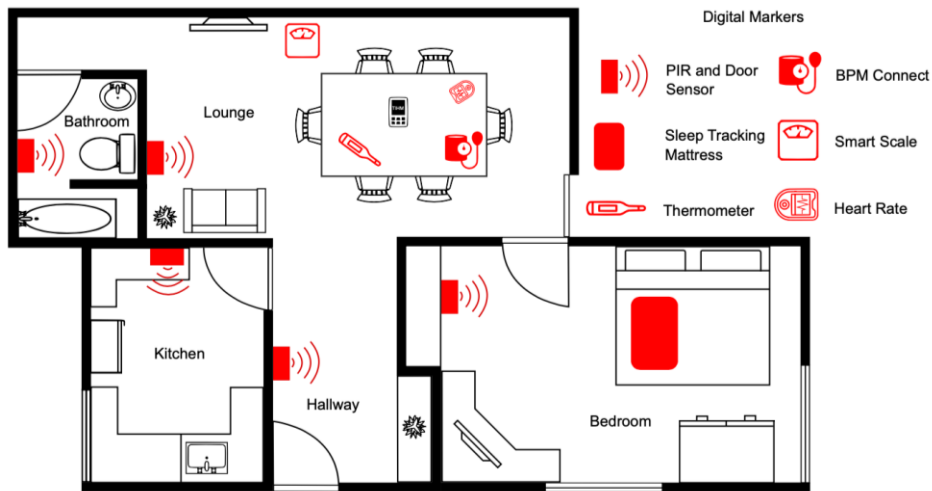
# Remote healthcare monitoring



Prof Helen Rostill



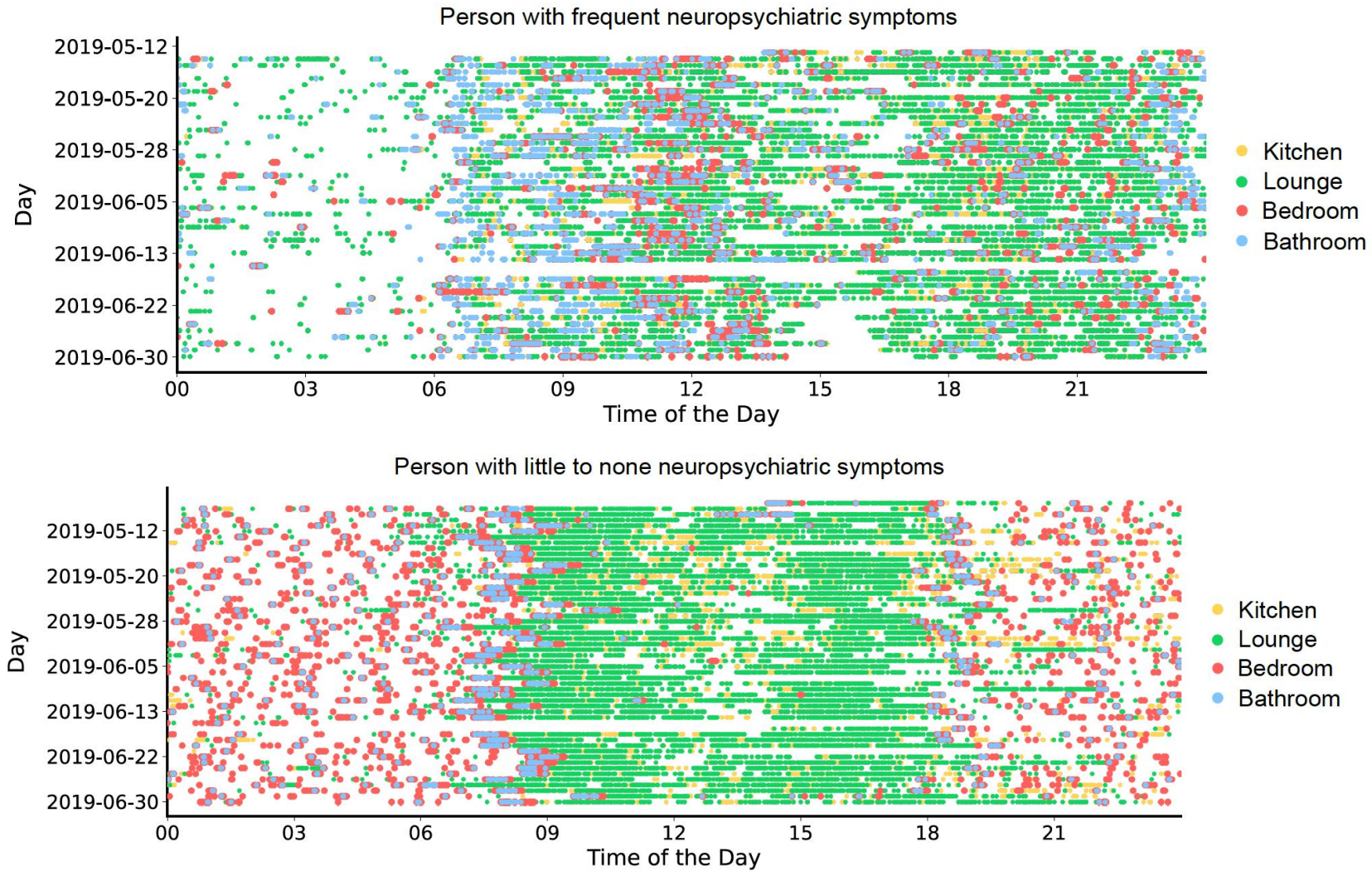
Prof Ramin Nilforooshan



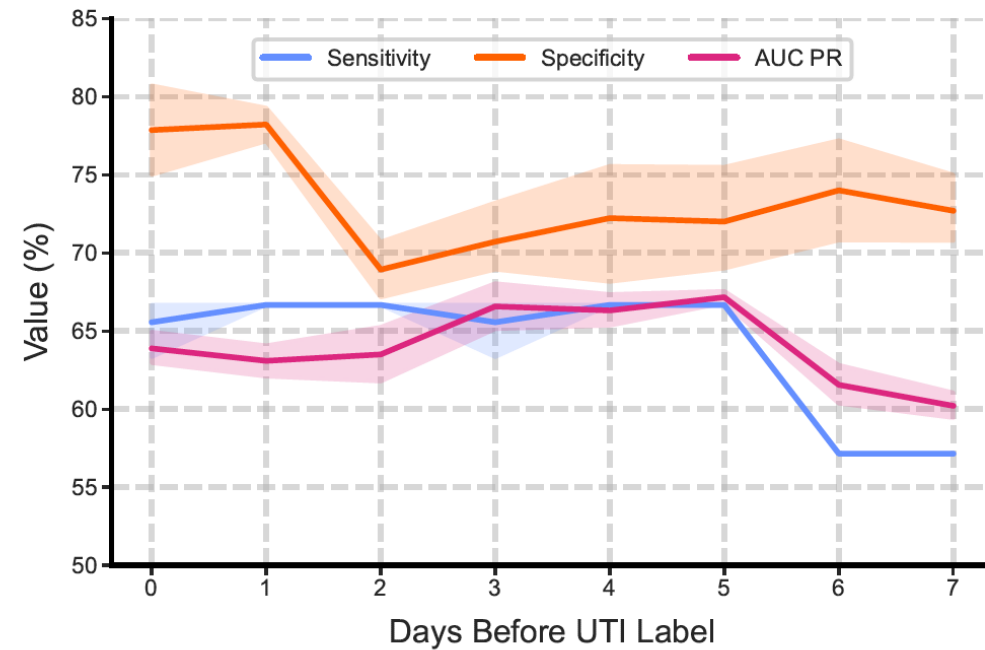
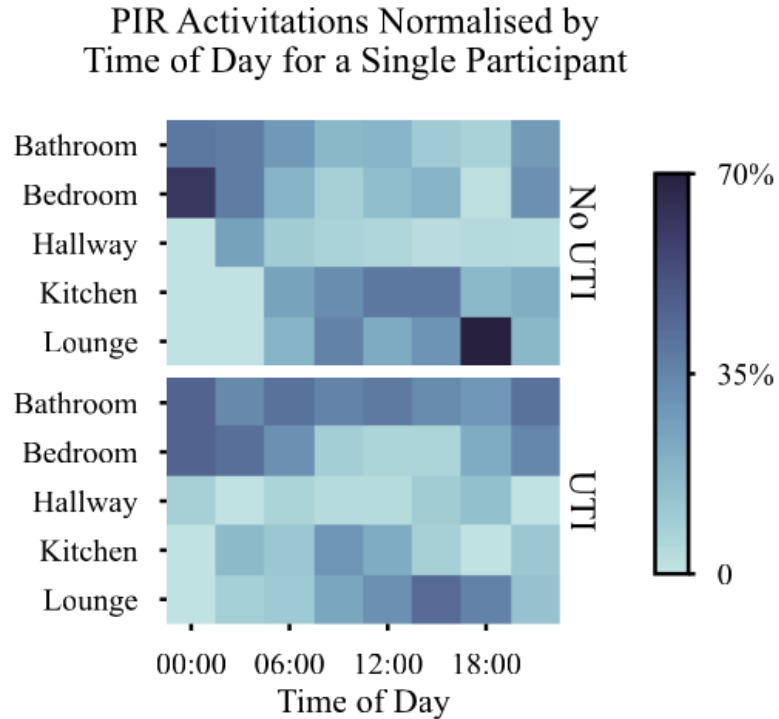
In collaboration with:



# In-home monitoring data



# Analysing the Risk of Urinary Tract Infections in People Living with Dementia



		Accuracy	No. of Participants	Positive : Negative	$\Pr(\hat{Y} = 1   \text{Sex})$
Date	Female	52.6 (31.8 - 73.4)	16	1 : 1.7	35.5 (32.4 - 38.5)
	Male	86.5 (76.2 - 96.9)	25	1 : 5.5	32.3 (30.9 - 33.8)
Date-ID	Female	54.6 (26.8 - 82.4)	11	1 : 2.1	37.4 (33.6 - 41.1)
	Male	85.3 (72.9 - 97.7)	20	1 : 4.1	38.0 (36.4 - 39.7)