



Session: Energy & Environment

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TAS Showcase

5th – 6th March 2022



TAS Showcase 2024

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Agenda

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- 14:15 - 14:25: Welcome and Overview
- 14:25 - 14:35: [EVtonomy](#): A Smart EV routing app
[Elnaz Shafipour](#), University of Southampton
- 14:35 - 14:45: [InterNET ZERO](#): Developing Participatory Futuring Approaches to Design Infrastructural Imaginaries for Sustainable and Trustworthy AI
[Michael Stead](#), Lancaster University
- 14:45 - 14:55: [A Citizen Carbon Budget for reducing CO2 emissions](#)
[Gisela Reyes-Cruz](#), University of Nottingham
- 14:55 - 15:05: Utilising Autonomous Systems for Effective Early Detection of Pests & Diseases in Forests
Calum Imrie, University of York
- 15:10 - 15:45: Panel Session
Chairs: Enrico Gerding & Sebastian Stein
Speakers: Elnaz Shafipour, Michael Stead, Gisela Reyes-Cruz, Calum Imrie



University of Southampton Energy & Environment Projects

UKRI AI Centre for Doctoral Training in AI for Sustainability

- 70 fully funded PhD studentships in the application of AI for Sustainability for 2024-2028 entry
- Research focuses around 5 themes:
 - AI for Transportation and Logistics
 - AI for Sustainable Energy and Buildings
 - AI for Sustainable Operations and Circular Economy
 - AI for Biodiversity
 - Sustainable AI



UK Research
and Innovation

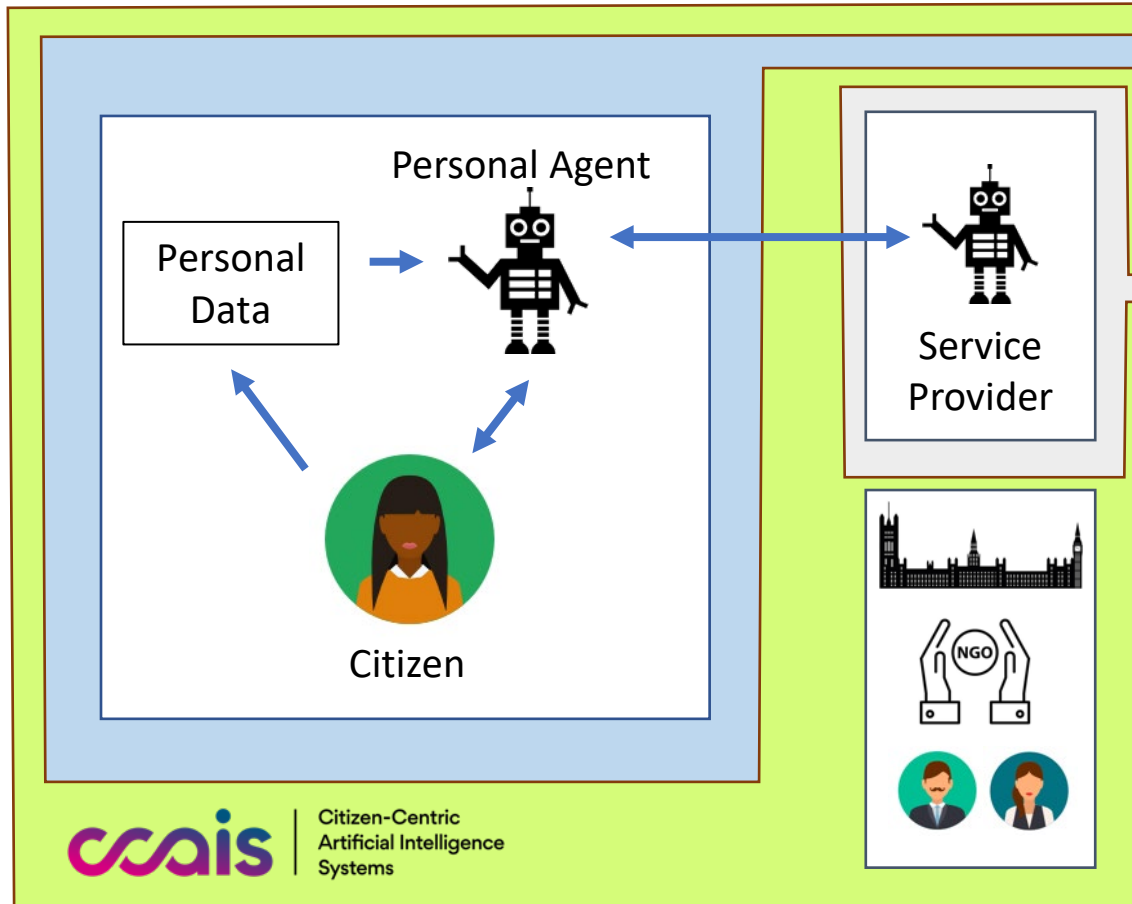
<http://sustai.info>



University of
Southampton

Citizen-Centric AI Systems

- UKRI Turing AI Acceleration Fellowship
- <https://ccaais.ac.uk>



Preference Learning

- Dealing with sparse data?
- How to elicit information from citizens while minimising the cognitive burden?
- How to transfer learnt knowledge between citizens?

Incentive-Aware Mechanisms

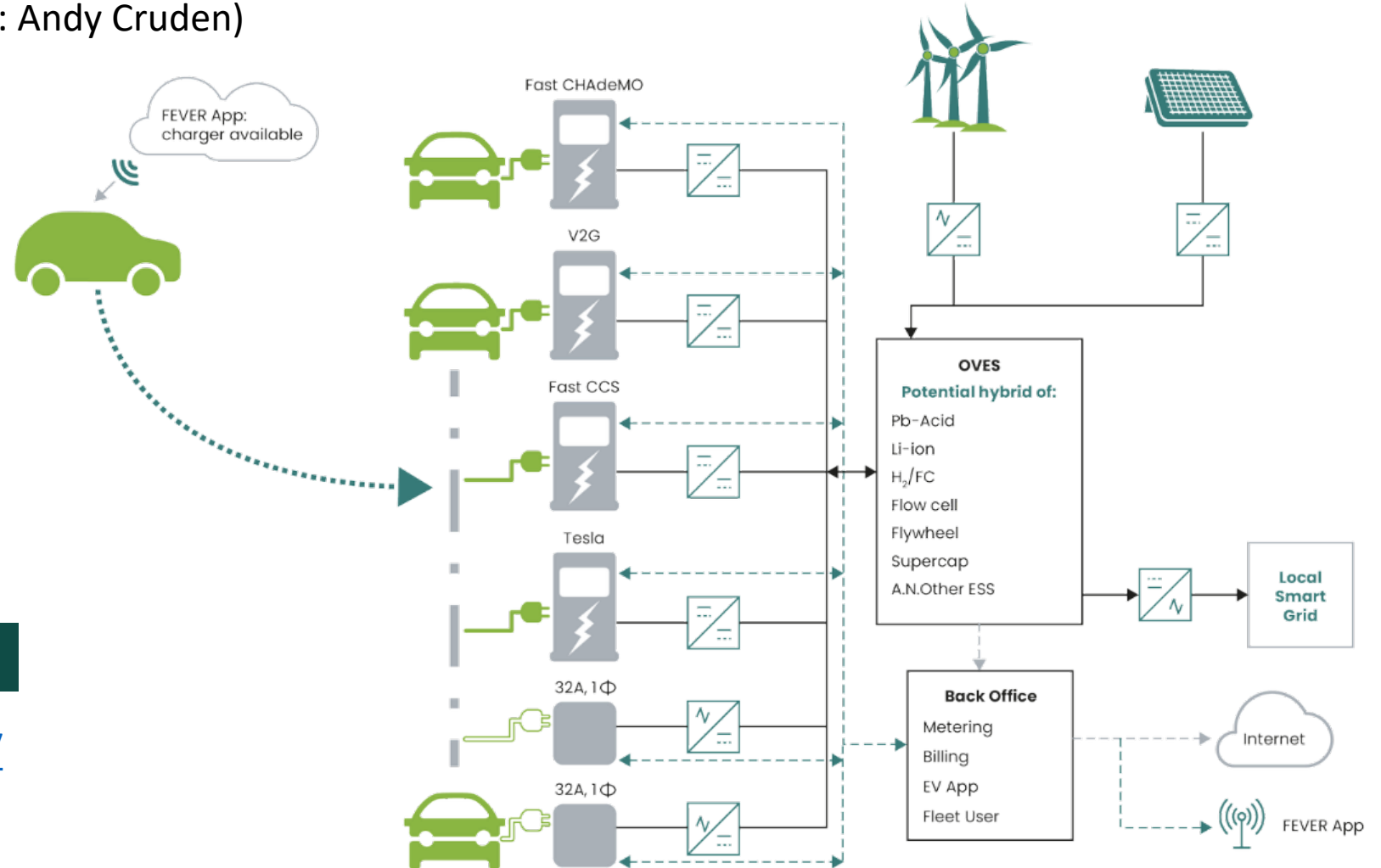
- How to minimise information that service providers need from citizens?
- How to learn what incentives work effectively? And how does this learning interact with strategic behaviour?

Explainability, Auditability and Fairness

- How to ensure decisions are seen as fair and equitable?
- How to explain decisions and decision processes of complex algorithms to citizens?
- How to enable all stakeholders to participate in a continuous feedback loop?

FEVER: Future Electric Vehicle Energy networks supporting Renewables

- EPSRC Programme Grant (PI: Andy Cruden)



- <https://www.fever-ev.ac.uk/>



Thank You



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