

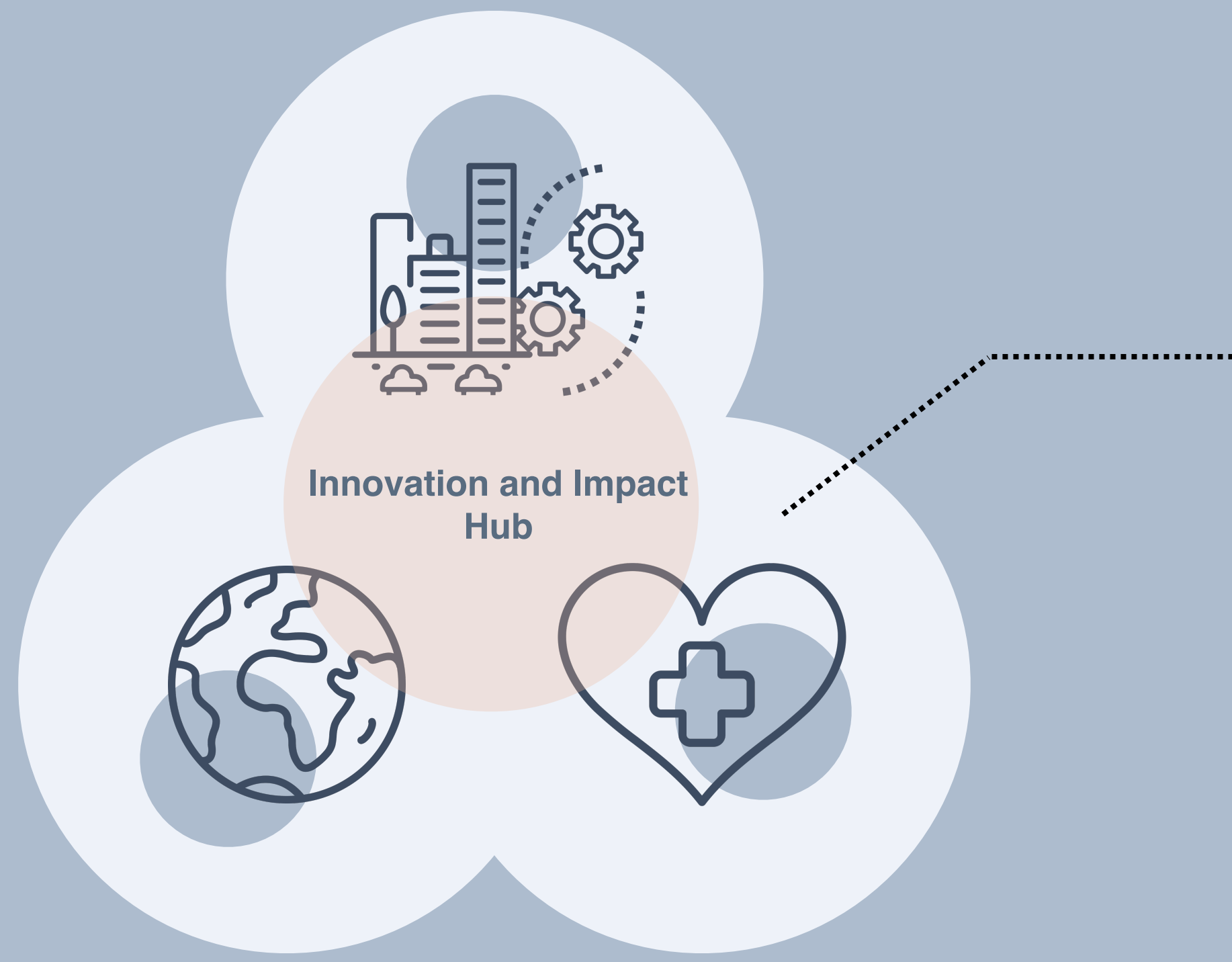
Synergistic Twinning: Bridging Health, Infrastructure, and Environment

Turing research and innovation
cluster in digital twins (TRIC-DT)

28/11/2023

Dr Sophie Arana





Advance the science and implementation of digital twinning and **use these advances** to address important **technological and societal challenges**.

Produce **open and reproducible computational tools** for DT design, development, and deployment that facilitate scaling of DTs and provide these tools as a freely available resource.

Build a **multidisciplinary community of practice** in digital twinning that **democratises access to DT technology**.

Multidisciplinary Research



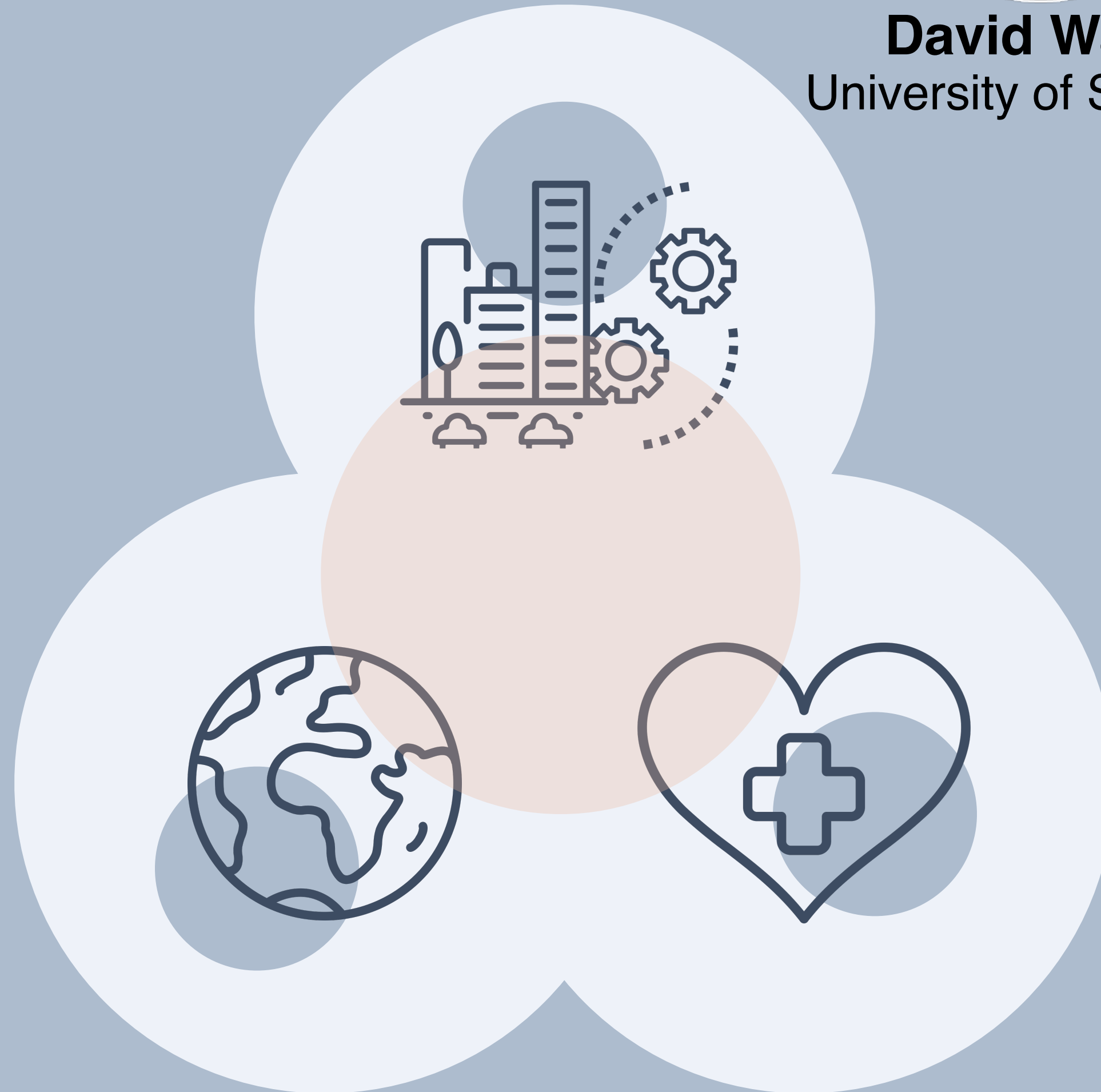
Infrastructure



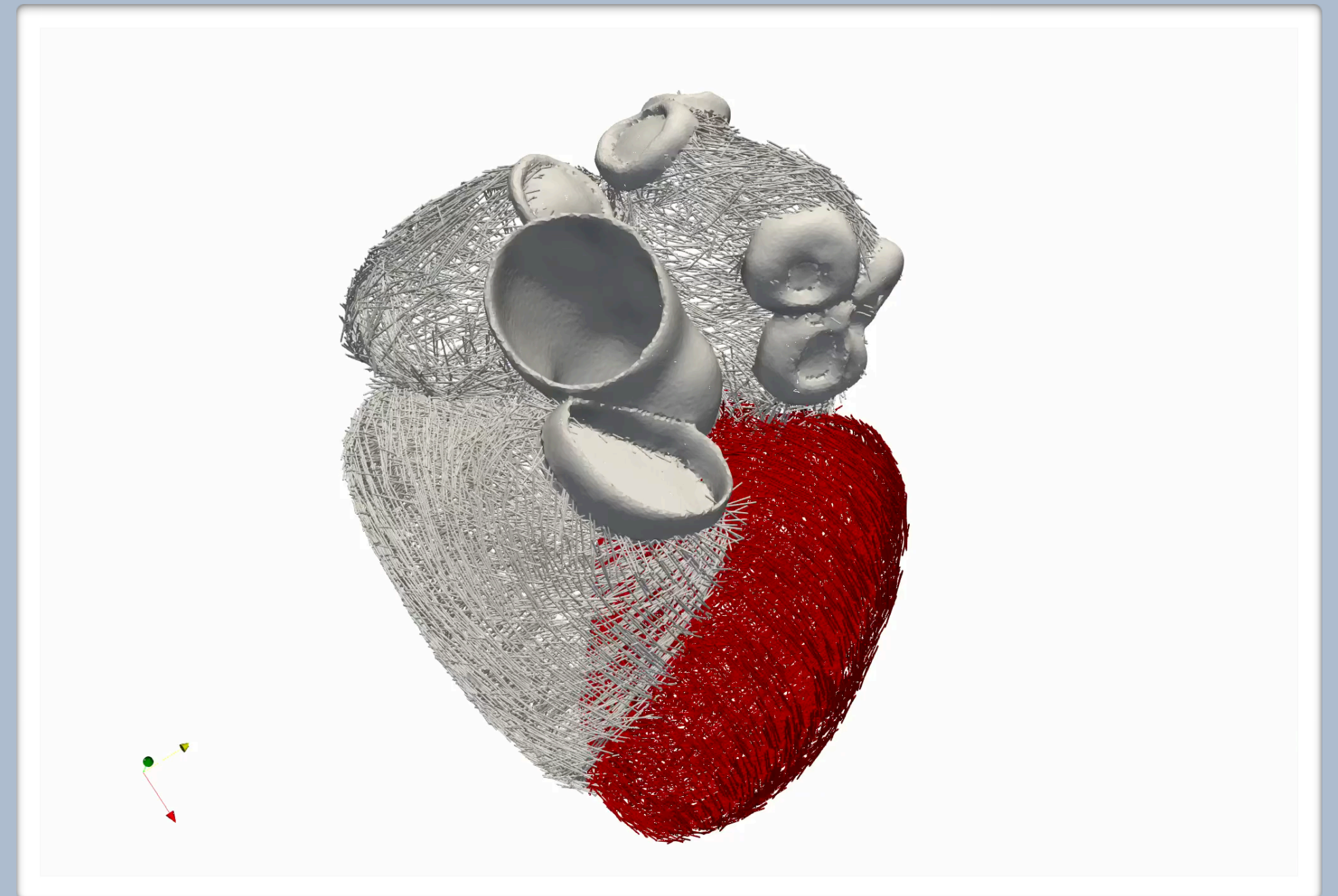
David Wagg
University of Sheffield



Keith Worden
University of Sheffield

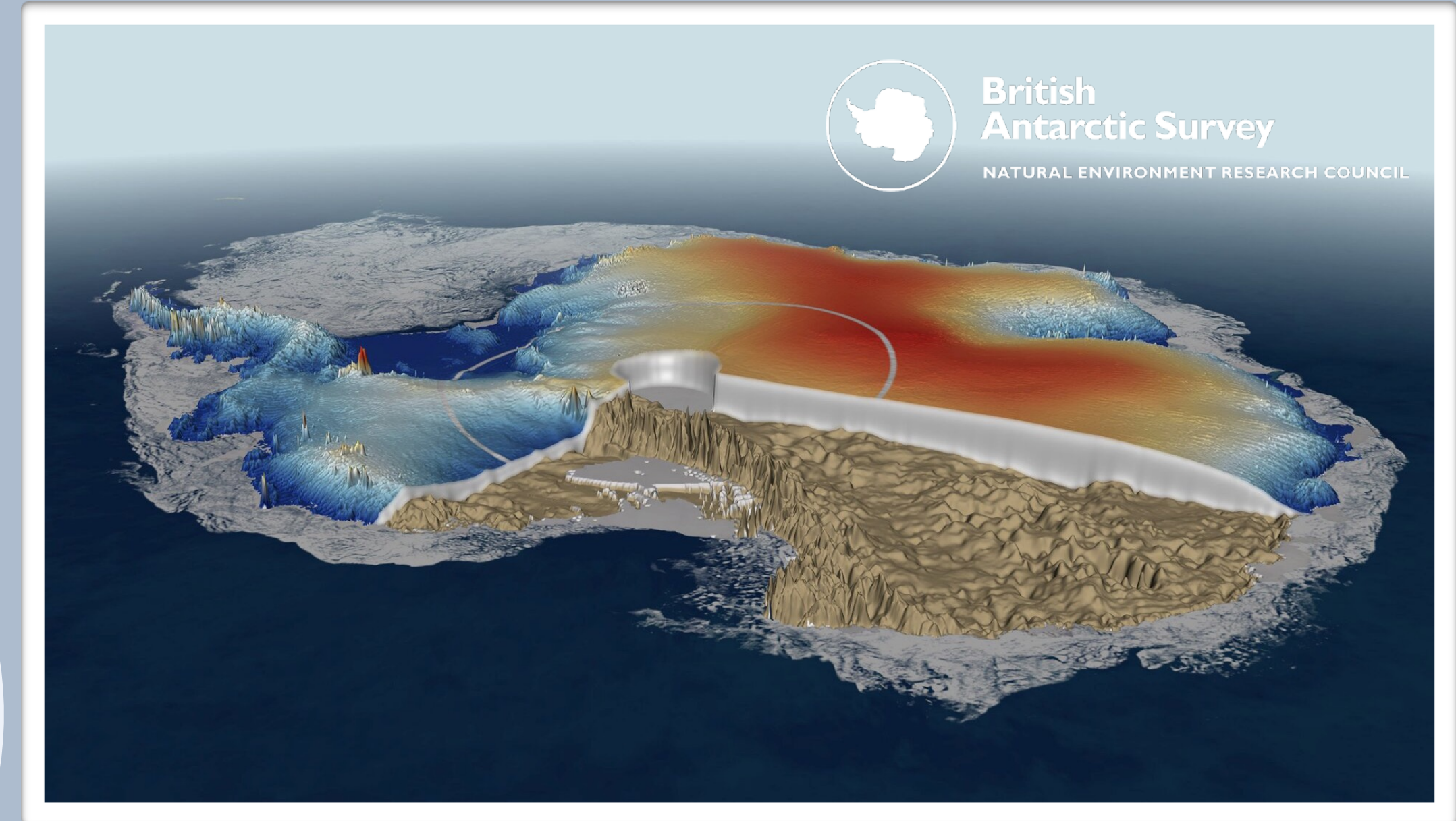


Health



Steven Niederer
Imperial College
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Natural Environment



Kirstine Dale
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Scott Hosking
British Antarctic Survey





Innovation & Impact Hub



Christopher Burr

TPS Senior
Researcher in
Trustworthy Systems



Kalle Westerling

Research
Application Manager



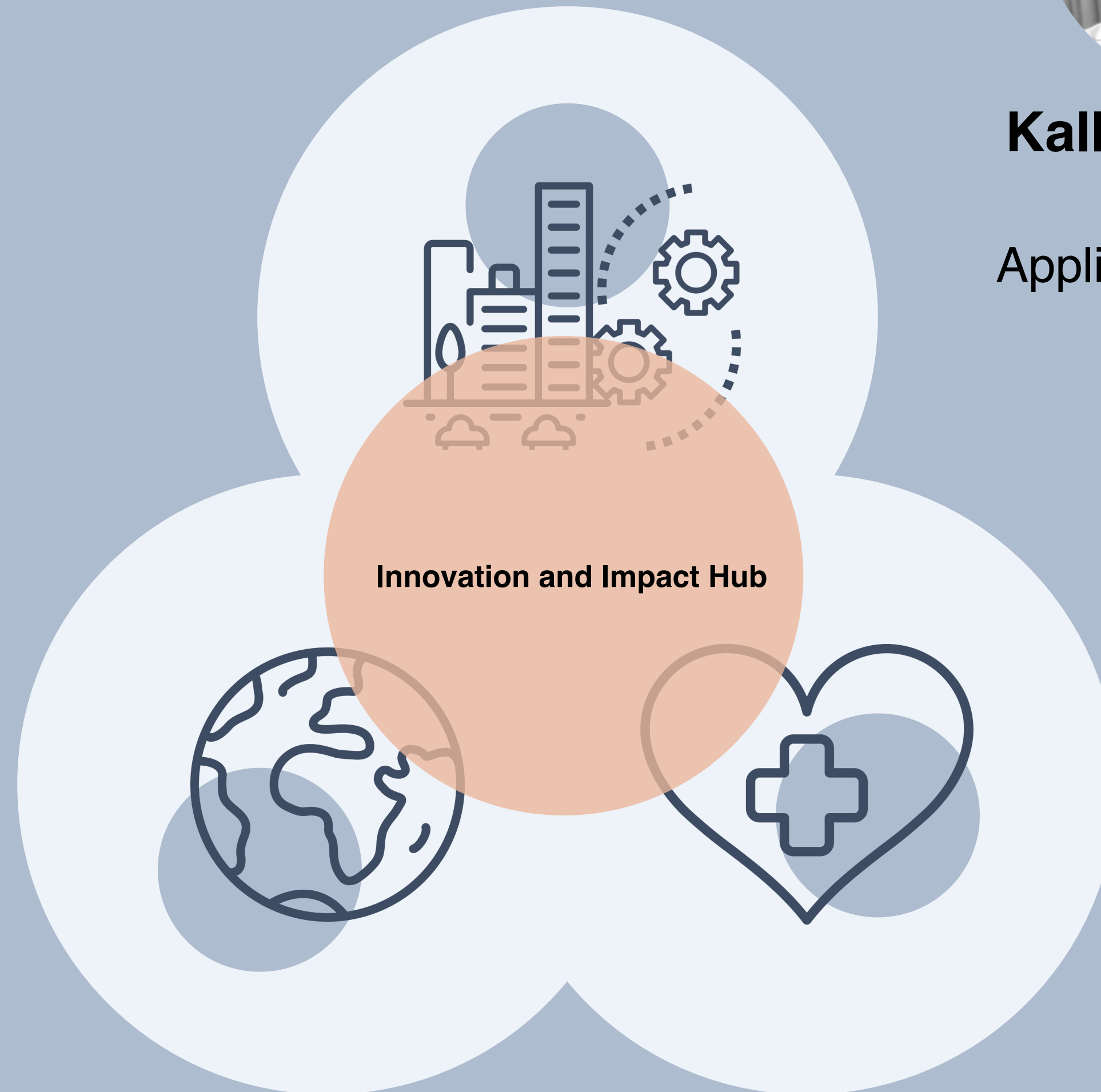
Sophie Arana

Research
Application Manager



**Cassandra
Gould Van Praag**

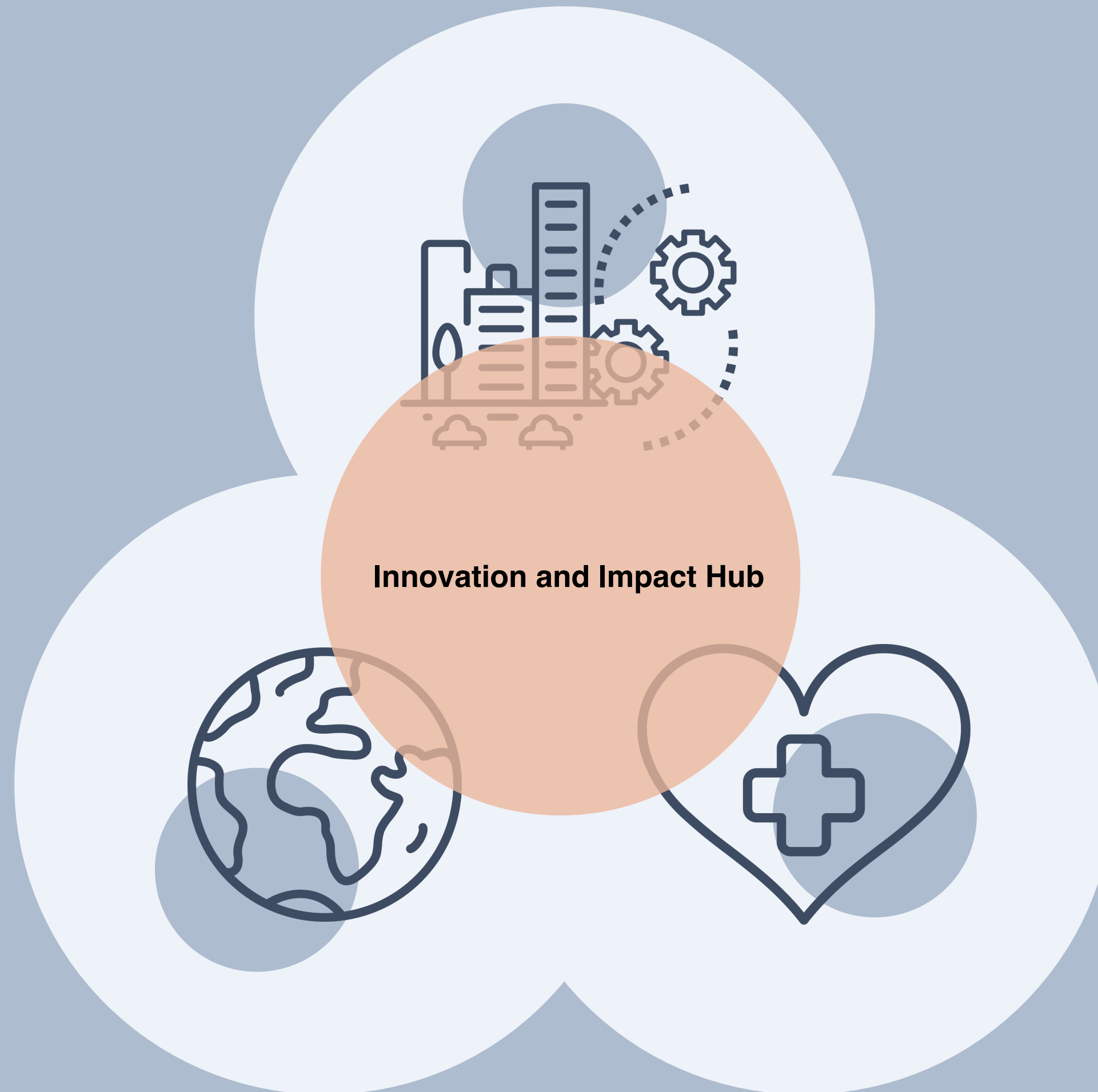
Senior Research
Community Manager



Innovation & Impact Hub



Christopher Burr
TPS Senior
Researcher in
Trustworthy Systems



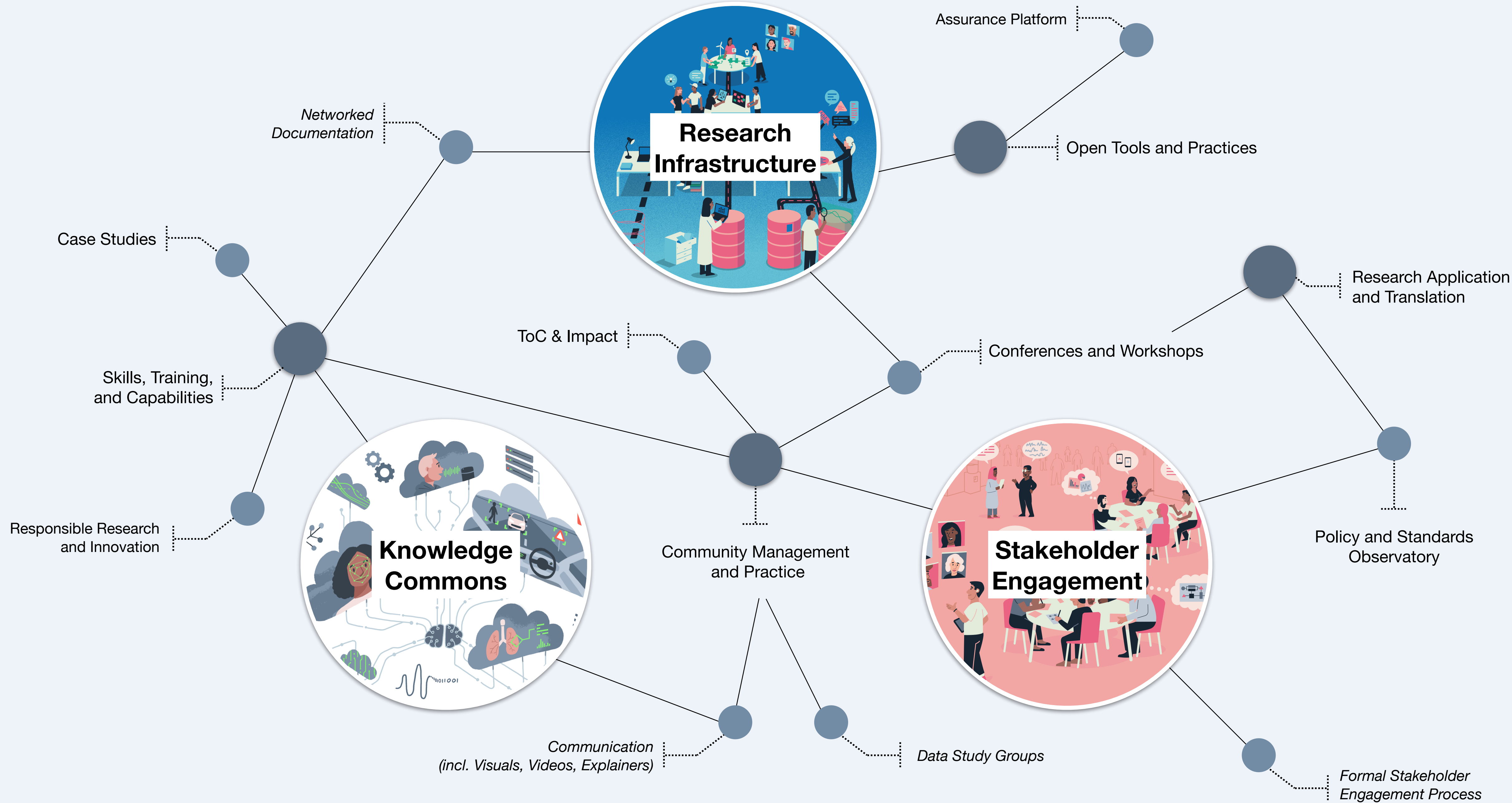
Eric Daub
Principal Research
Data Scientist



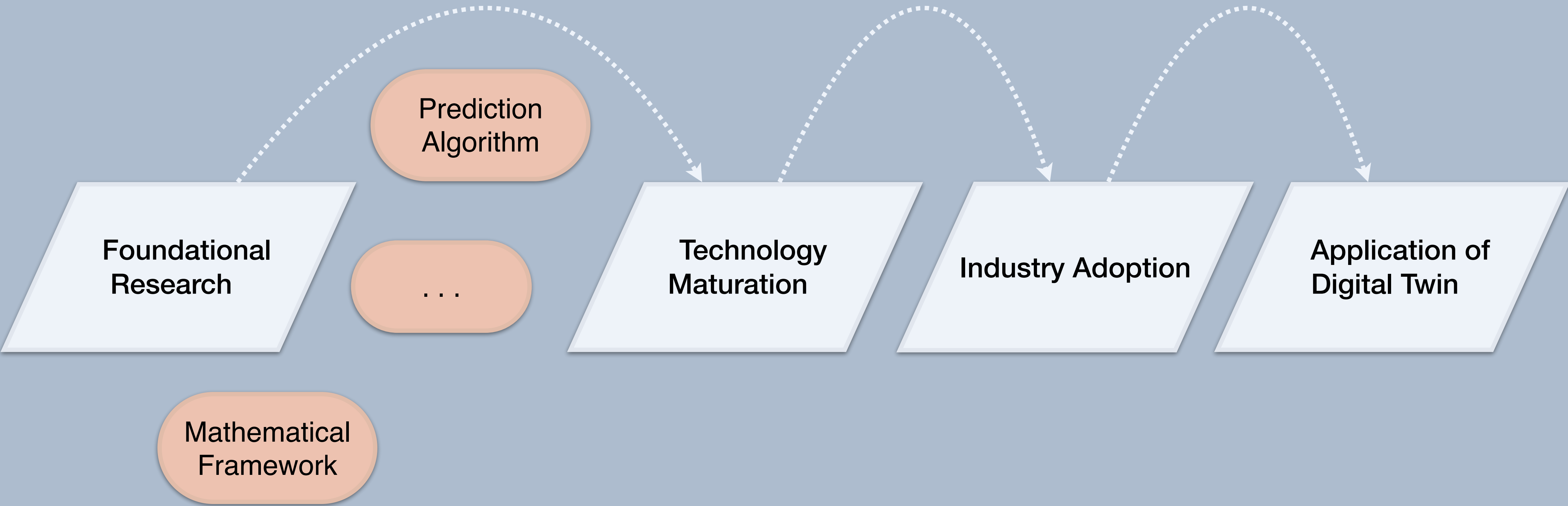
Aoife Hughes
Research Data
Scientist



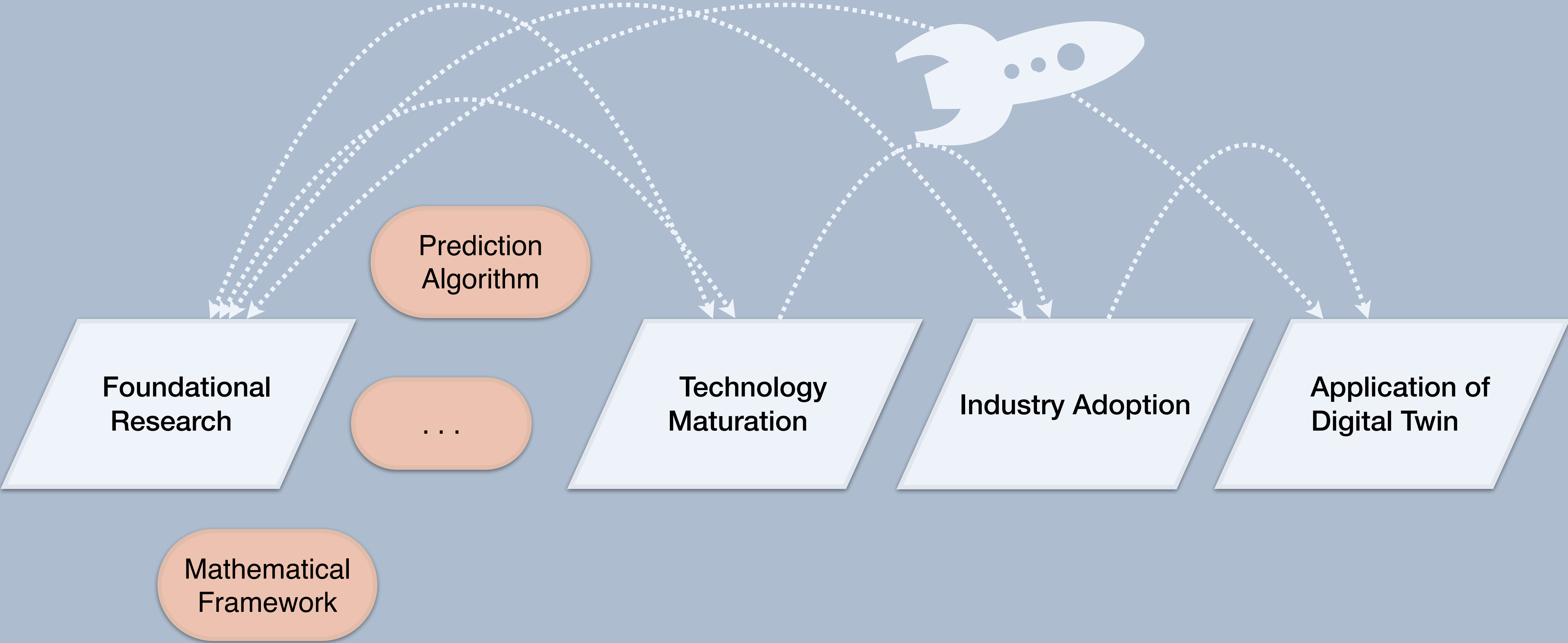
Martin Stoffel
Research Data
Scientist



Pathway to impact: Interdisciplinary & Collaborative



Pathway to impact: Interdisciplinary & Collaborative



Trustworthy and Ethical Assurance Platform

all contributors

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10.5281/zenodo.8198986

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License

MIT

build

passing

About this Repository

This repository contains the code and documentation for the Trustworthy and Ethical Assurance (TEA) platform—an application for building trustworthy and ethical assurance cases, developed by researchers at the [Alan Turing Institute](#) and [University of York](#).

To view the documentation site, please go to <https://alan-turing-institute.github.io/AssurancePlatform>.

Quickstart install instructions

To get started quickly with installing this platform vist <https://alan-turing-institute.github.io/AssurancePlatform/platform-details/installation/>

What is Trustworthy and Ethical Assurance?

Trustworthy and ethical assurance is a methodology and procedure for developing a structured argument, which provides reviewable (and contestable) assurance that a set of claims about a normative goal of a data-driven technology are warranted given the available evidence.

The following elements are central to this methodology and procedure:

- **The SAFE-D Principles:** a set of five operationalisable principles—Sustainability, Accountability, Fairness, Explainability, Data Stewardship—that have been carefully designed and refined to address real-world challenges associated with the design, development, and deployment of data-driven technologies.
- **Assurance Cases:** the documented argument that communicates the basis for how and why a goal has been achieved.

GitHub Repository

Assurance Platform

1

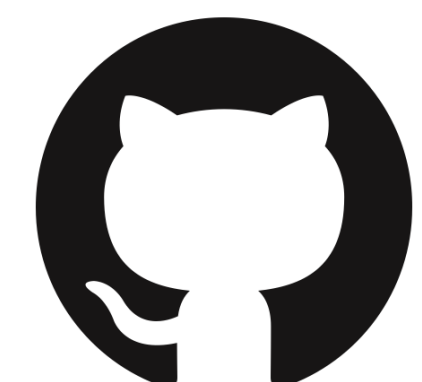
An open-source tool for building assurance cases

2

User guidance and best practices

3

Community resources and support



Get Involved!



**The
Alan Turing
Institute**

TRIC-DT Innovation and Impact Hub

<https://github.com/alan-turing-institute/tric-dt>