



# Augmented Evolutionary Intelligence

**SOLVING COMPLEX OPTIMISATION PROBLEMS  
USING AI AND VIRTUAL REALITY**

Resources | Manufacturing | Routing |  
Scheduling | Health & Public Service |  
Pharmaceuticals

**The  
Alan Turing  
Institute**

**accenture**



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Want a sneak preview of the research?  
Click to hear from our presenter.

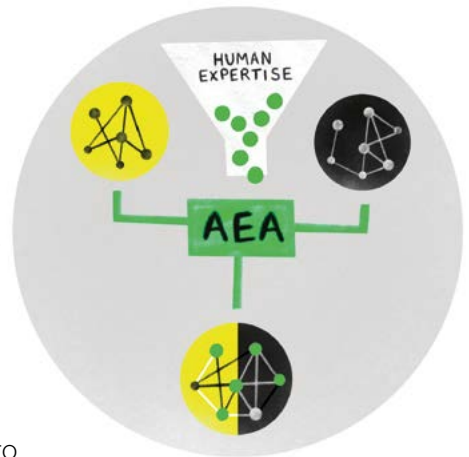
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## The challenge

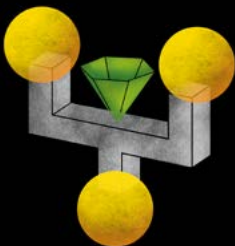
In our world, solving complex optimisation problems can be key to unlocking greater efficiency and a better experience. These problems can range from network configurations to vehicle routing, logistics, factory scheduling and so on. Sometimes the search space is so large that throwing more computer power at the problem won't work.

## Our research

We use heuristics and advanced technology to solve for complex optimisation problems. We take human expertise into account through gamification and Virtual Reality, and feed this best practice into our system. The result is a powerful collaboration between humans and AI, using technology called 'evolutionary algorithms' and machine learning.



*We cross-over genetic material from 'parent' solutions, and weave in mutation based on expert know-how.*



To find out more, contact Edward Keedwell:  
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### Project team:

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