

Engineering the 21st century

From AI-on-chip technologies to bio-interfaces

Imagine a world where you have the power of a data centre in the palm of your hand without impacting the environment or your own security.



SCALE

Land and resource usage for data centres and Telecomms is unsustainable



SPEED

Large and slow AI models mean more servers serving fewer customers



SUSTAINABILITY

Datacentre energy demands are expected to reach up to 20% of global consumption if unchecked



SOCIAL RESPONSIBILITY

Cloud computing is vulnerable to cybersecurity, privacy and trust breaches



SMART-EVERYTHING

Miniaturising electronics is increasingly unsustainable

OUR TECHNOLOGICAL TARGETS

Support up to

500x

more computations per second

Reach up to

100x

faster access to data

Use up to

1000x

less energy for computing

Deliver training capabilities at the edge making it

100x

cheaper to access AI capabilities

Deploy AI at

100x

smaller form-factors



Find out more:

eil.ac/EVA

We are creating a novel entrepreneurial engine to generate semiconductor technologies that drive optimal AI processing exploiting IP across a diverse range of applications and markets.

The **Edinburgh Venture builder for AI-hardware, EVA**, will co-locate researchers, innovators and investors creating critical mass in a thematically cohesive business. This will translate academic research that has clear market fit, adopting an agile approach to commercialisation that capitalises on successes and failures, and upskills a dedicated resource to deliver viable technologies underpinned by world-leading research.



THE UNIVERSITY of EDINBURGH



EDINBURGH INNOVATIONS