# AI Chip Enclosures

## The problem

After the development of nuclear weapons, nations eventually agreed to ban the tests of nuclear weapons. Originally, a full ban was not possible though, because no technology existed to detect underground nuclear tests underground reliably. It needed the development of novel technology using "seismometers" to enable the later ratification of the Comprehensive Nuclear-Test-Ban Treaty in 1996.

In today's world, one advanced technology that poses immense risks is Artificial Intelligence. One way to reduce those risks is to regulate the use of compute hardware which is required to train highly advanced models, an approach called compute governance. Similar to the Test Ban Treaty, many actors support it, but it is missing a similar key technology enabling the trustworthy verification of commitments between actors.

## What we will do

We want to develop a "seismometer" for compute governance, a technology that enables the verification of compute governance compliance. Compute governance experts proposed a promising technology in recent months (see here and here).

The technology is a secure layer with a "physical unclonable function" that is wrapped around AI chips. An attacker cannot penetrate, remove, or reproduce such a layer without detection. Because of that, you have assurance that nobody secretly disables the on-chip security mechanisms, which enables you to verify compliance with regulations. This facilitates trust between actors, which might enable the establishment of international compute governance regulations, among other benefits.

There is a large potential market for this technology. Because of that, we plan to develop this technology as a for-profit startup.

## How you can help

There are multiple ways on how you can support us:
- You can advise us with your expertise, e.g. in cybersecurity or for-profit startups
- You can fund our operations to speed up our progress
- You can join our team and help us develop this product
- You can share this document with other people

You can get in touch with us through this form: https://forms.gle/HMAgtBUPc8B2oCC2A