Tensorcrypt

Empowering organisations to securely share and analyse confidential datasets

OVERVIEW

Sharing data with key partners has never been more important for data-driven organisations. Yet, **achieving this securely and efficiently remains an unsolved problem**. Existing technologies expose potentially sensitive data at some point in the processing chain when it is used, stored or sent, resulting in several recent high-profile breaches.

Born out of expertise at the Information Security Group at Royal Holloway, University of London, Tensorcrypt is an innovative software solution that uses groundbreaking confidential computing to address the security issues of processing sensitive third-party data. We have currently received funding from InnovateUK's CyberASAP cybersecurity pre-seed accelerator.

OPPORTUNITY

- 78% of executives consider **data sharing** to be **'very important'**, yet **only 15% were actually sharing data** with key partners *(Harvard Business Review, 2019)*.
- **Security risks** have **outweighed the benefits**, taking two years to recover lost revenue after a breach *(Accenture, 2019)*.
- Privacy-enhancing computation, used by Tensorcrypt, is a **Gartner top 10 IT trend in 2021** for bridging this issue.

FEATURES

Unlike other core technologies, e.g. homomorphic encryption, Tensorcrypt is designed for data-intensive scenarios with high-throughput and low-latency requirements. End-users interact with confidential data through a restricted to interface a hardened execution environment built to resist sophisticated software attacks.

Pain Points	Tensorcrypt USPs
Slow for large-scale analyses (6-8 orders of magnitude slower than native)	**Near-native** processing (+7-10% time overhead)
Poorly suited to existing data workflows	**Simple** API-level access
Outsourced processing	**On-prem** processing
Bespoke hardware	**Modern Intel and AMD CPUs**, e.g. laptop, workstation, server

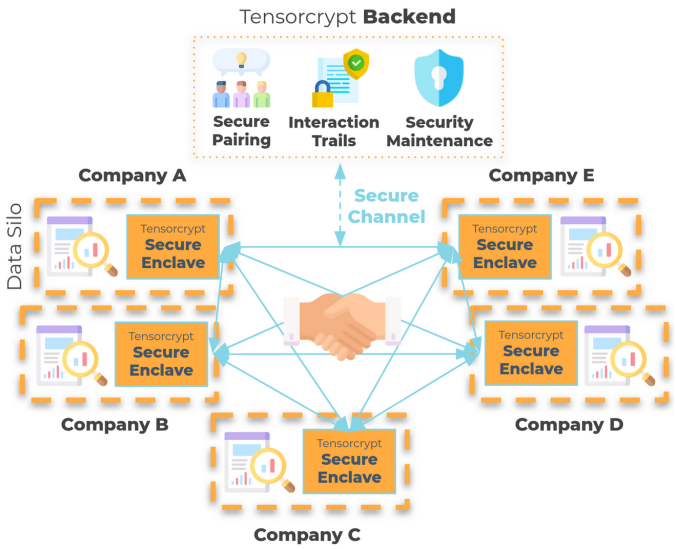
BUSINESS MODEL

We are a B2B software solution that offers:

- A tiered **subscription model.**
- **Plug-in licenses** for popular data products, e.g. Tableau.
- On-site and remote **support**, and **training** workshops.

SOLUTION

Tensorcrypt enables organisations to share and process data **without it ever being exposed** in the clear, with **trackable data interactions** and a **focus on high performance.**



With Tensorcrypt, analysts, scientists and other data users can:

- **Unlock value** by addressing in-use, in-transit and at-rest exposure for mitigating security and compliance risks.
- **Create powerful cross-party datasets** without revealing sensitive data to other parties.
- **Perform collaborative** statistical **analysis** and machine learning on protected shared data.

Use-cases:

- Anti-money laundering (AML)
- Know your customer (KYC)
- Fraud analytics
- Genome analysis
- Clinical research
- Int'l law enforcement
- Supply chain analysis

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We are seeking interest from organisations to evaluate a pilot version of our system