

*We build AI-driven products
for your competitive edge*

SILO AI



Europe's largest private AI lab

2023

Who we are

Europe's largest private AI lab

SILO_{AI}

What we do

Trusted AI partner. We build AI-driven solutions and products by providing world-class services and tooling.

Our vision

AI for people. A world with safe human-centric AI that frees the human mind for meaningful work.

300+ experts

150+ PhDs

200+ production-grade AI

ML | CV | NLP | LLM

Cloud | IoT | Embedded

Nordics

Finland, Sweden,
Denmark, Norway

Europe

The Netherlands
Switzerland
Germany

North America

United States
Canada



SiloGen for trustworthy generative AI & LLMs

SiloGen is a platform for trustworthy generative AI, covering data-centric development tooling, base models and vertical assets.

With SiloGen, Silo AI's large, experienced AI team helps companies build custom LLMs, covering many tasks:

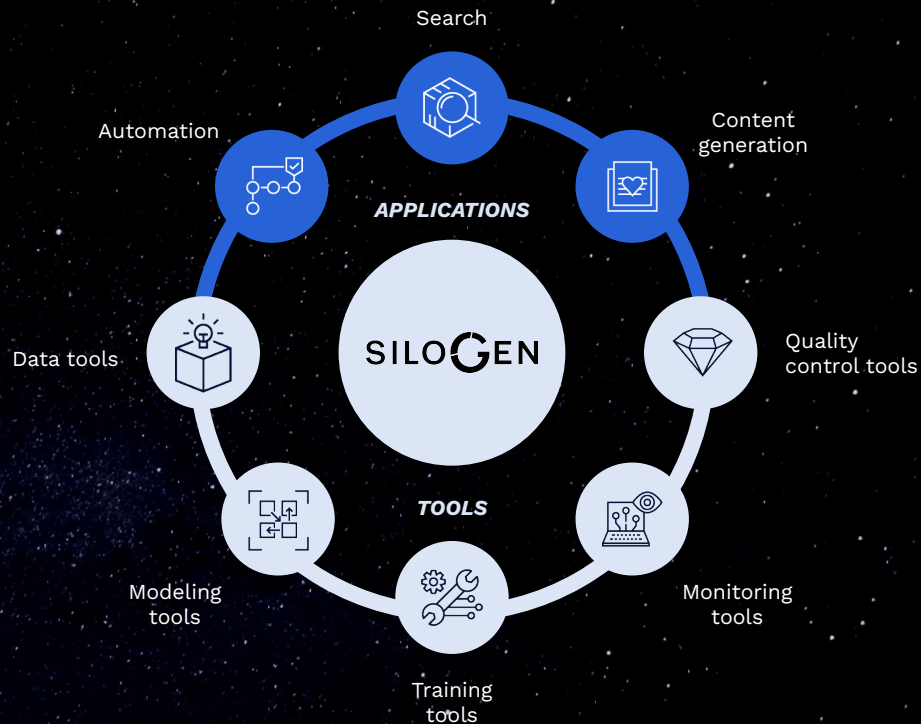
- *Training massive LLMs*
- *Fine-tuning LLMs for use cases*
- *Developing LLM based applications*

Applications

Common use cases and applications of LLMs and generative AI.

Models & Tools

Models and platform for robust and scalable LLM development.



SiloGen base models being trained now

- Being developed in collaboration with research partner TurkuNLP
- Trained on LUMI supercomputer
- Will support all official European languages
- Data collected in the EU funded HPLT project
- Models will be released

Model size (parameters)	Tokens	Comparison
7B	2.4T	2T tokens (7B LLaMa 2)
15B	2.4T	2T tokens (13B LLaMa 2)
30B	2.4T	2T tokens (34B LLaMa 2)
60B	2.4T	2T tokens (70B LLaMa 2)
120B	4.8T	366B tokens (174B BLOOM)

- focus currently on Finnish, English, program code
- data mostly monolingual (not translated pairs)
- cross-lingual benefits already apparent
- lack of locally relevant quality tests is a bottleneck!

General base models are only part of the story!

Turning base models into vertical models for inclusion in products

Data initiative

Unique synthetic data generation capabilities with specialized LLMs and proprietary domain specific data assets

Base models

Multilingual high quality base models

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Fine tuning



Continuous model optimization through human feedback, instruction fine tuning and reinforcement learning with AI feedback (RLAIF)

Specialized LLM API

Serving of the specialized LLM and continuous feedback, allowing SiloGen to constantly collect more data, learn from feedback and build better specialized LLMs and attendant knowledge sources.

Quality evaluation

Unique domain specific evaluation benchmarks and data with human and AI feedback

Example use cases for specialized models



BUSINESS CRITICAL B2B CO-PILOT

Technical sales and customer operations in high-risk and high reward B2B environments



HIGH-SENSITIVITY B2C CO-PILOT

Virtual sales agents co-pilots for high sensitivity and high regulation environments (e.g. retail banking)



HEALTHCARE CO-PILOT

Healthcare-specialized model tailored for healthcare data structures and terminology



some more general challenges for us to think about

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- The best and most valuable knowledge we have has been put into textual form for the past five hundred years
- Nordic libraries and archives are trustworthy repositories of such data
- A path for guaranteeing quality of shared open language models
- Getting access to this treasure of shared knowledge is cumbersome

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needs political
guidance to memory
institutions!

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needs more research!
and more data initiatives!

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 - "Two people are seen sitting before a wave pool and one leads another out onto the water on a board. The person ..."
 - "A cowboy rides a horse out of a corral and enters into a fenced off area. The man rides his horse out of the fenced are and throws a rope ..."
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needs more attention
both from industry and
from academia!
together!

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pay attention to fun
side effects!

RFC:

3d edition of the Nordic State of AI report is under production

Input is welcome!

learnings, experiences, insights from industrial practice and use

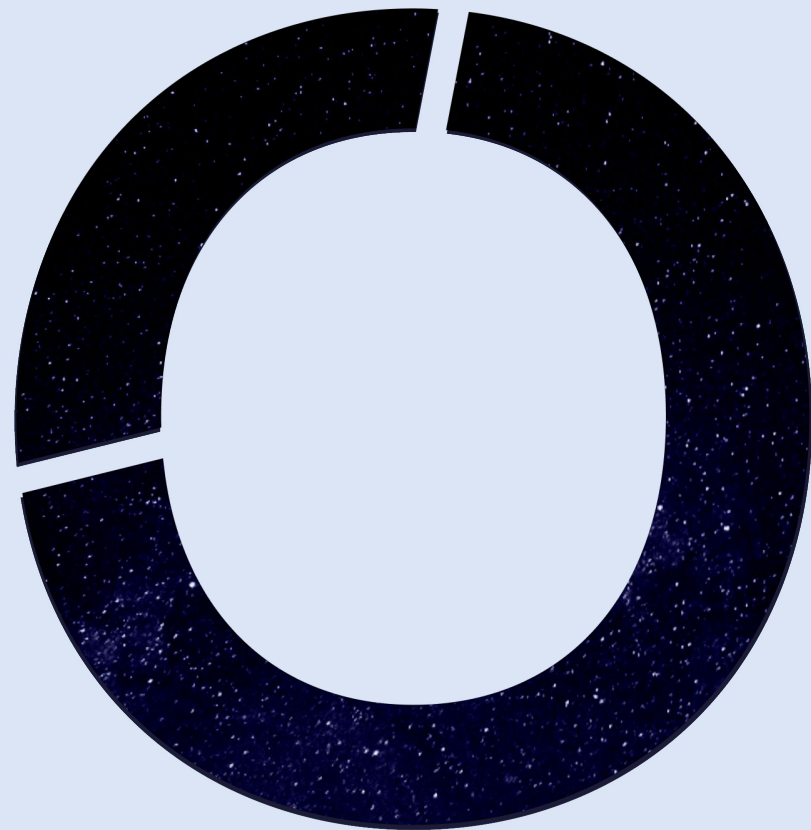




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