WORKING WITH **160** PILOT USERS

480% GROWTH SINCE ALPHA LAUNCH

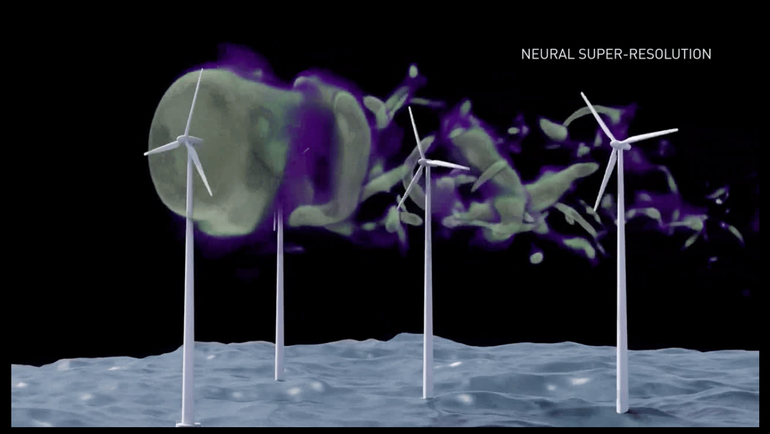
Siml.ai

The platform for AI-based physics simulations

Imagine you're designing a hydro power plant. It's critical your solution prevents future mistakes, reduces complexity and cost. Traditionally the process took years and cost millions, requiring expensive compute.

Siml.ai does it 10-100x faster

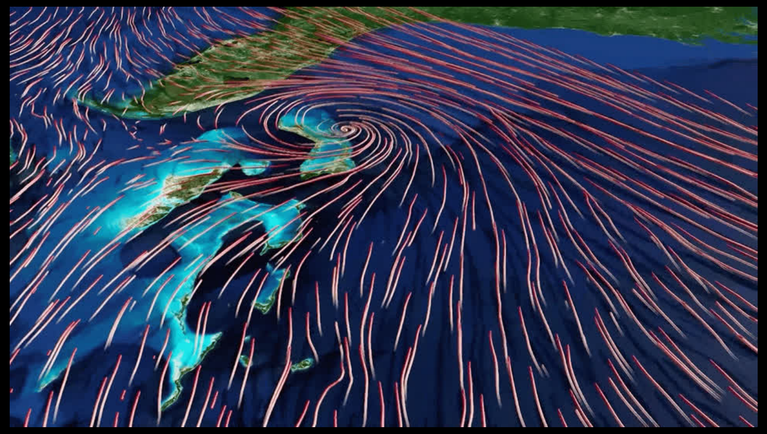
WITH SIML.AI YOU CAN SAVE TIME & COSTS



The time of virtual physics experiments is cut to

HOURS

instead of days or weeks



With AI, simulations are up to

50,000x

faster

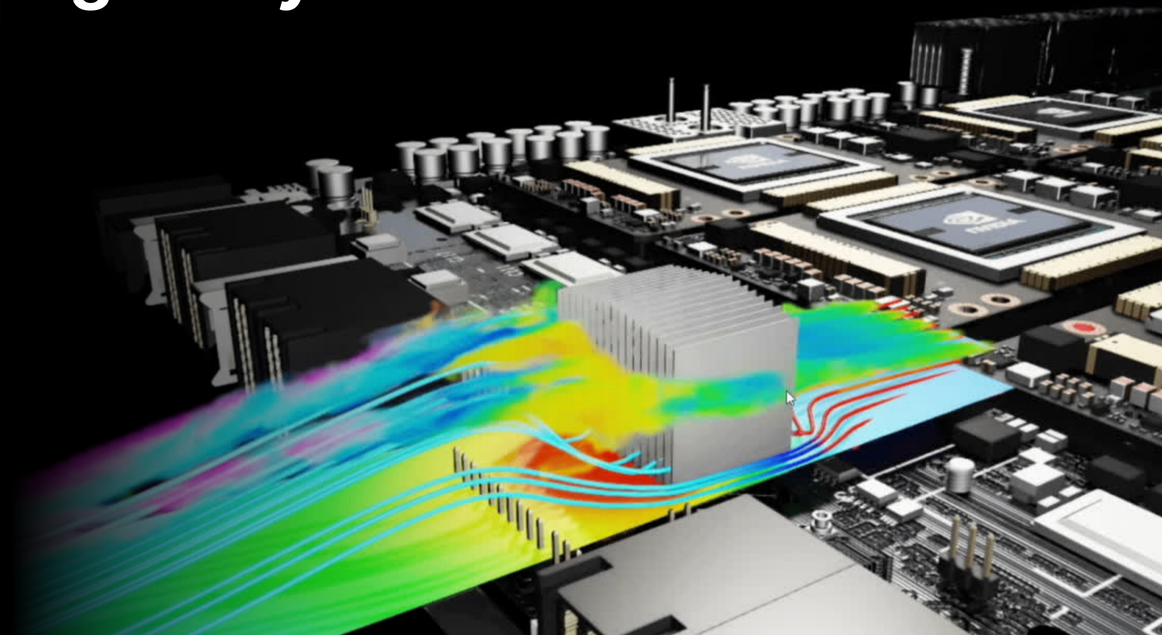
Powerful hardware is in the cloud, available in

1 CLICK

on the web-based browser

OUR MISSION

To democratise scientific-grade simulation tools by making it easy for **anyone** to develop physics-based simulations and deploy them in their workflows, regardless of their technical skills. By making scientific simulation almost **real-time**, **user-friendly**, and **accessible**, we want to reach all engineers and physics enthusiasts **globally**.



SIZE OF MARKET

Market size value in 2023

USD **20.96** billion

Forecast for 2030

USD **51.11** billion

Growth rate

CAGR of **13.6%** from 2023 to 2030

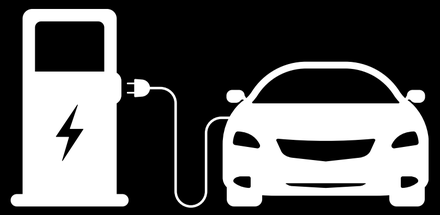
GVR Report: Simulation Software Market Size, Share & Trends Report 2023 - 2030

IDEAL CUSTOMER PROFILE (FOCUS ON B2B)

1.

Tech companies relying on **Computational Fluid Dynamics** (CFD) such as:

TESLA



2.

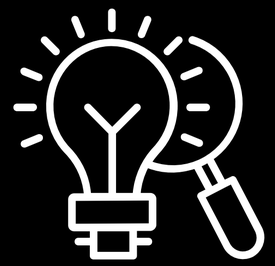
Consultancy companies providing **simulation services** to their clients:

RESOLVED ANALYTICS

3.

Universities invested in **research in physics-informed machine learning**

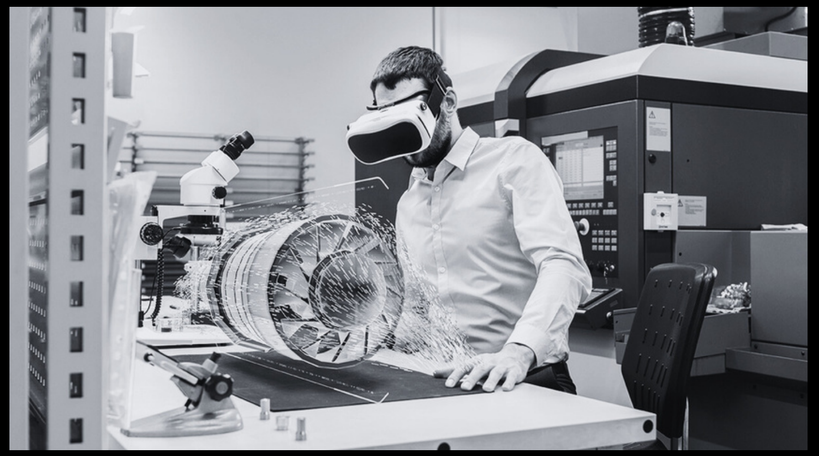
BROWN UNIVERSITY



IDEAL CUSTOMER PROFILE (FOCUS ON INDIVIDUALS)

1.

CFD Engineers. Works at the engineering consultancy company or/and at the Technical University. They need a reliable, no-code, web-based, fast simulation platform. They create technical analysis about the simulated product or technology characteristics and in academic setting, they write research papers and use Siml.ai for research data.



2.

Engineering/Physics students. They need reliable scientific simulation software for their research papers and other practical projects. Perhaps they have access to another software through their universities, but the interface is slow and complicated, with an outdated design. They want something modern, fast, and affordable.

COMPETITORS

Traditional CPU/GPU-based simulation software

Modern GPU-based & AI-driven simulation software

COMSOL Multiphysics

Multiphysics, CFD, Heat Transfer and Acoustics Module

Core license: $5,000+/yr

Price per Module:
One-Year Term: **$4,998**
Perpetual: **$9,995**

ANSYS

Multiphysics Solver
$43,000/year

ANSYS Fluent (CFD)
$29,000/year

HFSS version 9
Starts at $40,000/year

Monolith AI

Data-driven modeling with no-code AI tool, **cannot use without data**

Focusing on product/technology testing and product design optimization

Automotive, industrial and aerospace

Navasto NAVPACK

Data-driven AI modeling through Blender/Paraview plugin, **cannot use without data**

Focus only on product design optimization

Automotive and marine

Neural Concept

Data-driven AI modeling platform, **cannot use without data**

Heat transfer, design optimization, HVAC, structural mechanics, electromagnetics

Needs training data from simulations created in other simulation SW

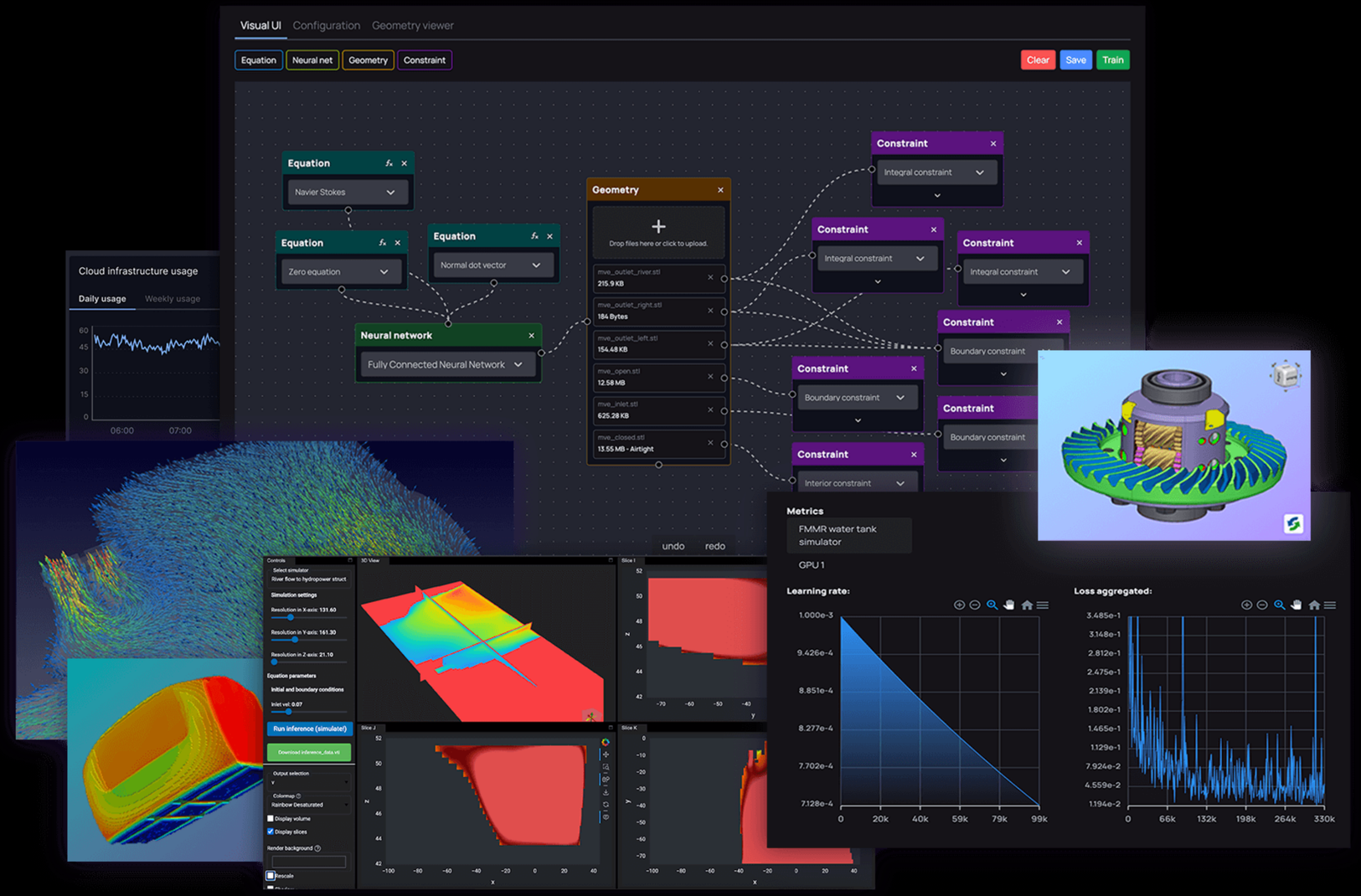
OUR CURRENT PRICES

FREE	STARTER (14-DAYS TRIAL)	STANDARD (14-DAYS TRIAL)	PRO (14-DAYS TRIAL)	ENTERPRISE
ALWAYS FREE	€199/ month	€499/ month	€999/ month	Have a bigger challenge to solve?
• Up to 3 public simulators in Model Engineer • Access limited to one Tier 1 computing resource	• 50GB SSD storage included • Store datasets of up to 25GB • Access up to Tier 2 computing resources • Up to 10 simulators in Model Engineer	• 250GB SSD storage included • Store datasets of up to 100GB • Access up to Tier 4 computing resources • Up to 20 simulators in Model Engineer • Up to 20 simulators in Simulation Studio	• 1TB SSD storage included • Store datasets of up to 250GB • Access of up to Tier 6 computing resources • Unlimited simulators in Model Engineer • Unlimited simulators in Simulation Studio	• All features from Pro • Custom computing resources with tens of GPUs • 24/7 support • Custom simulator development
CHOOSE PLAN	CHOOSE PLAN	CHOOSE PLAN	CHOOSE PLAN	CHOOSE PLAN

What means “Access to Tier X computing resources”?

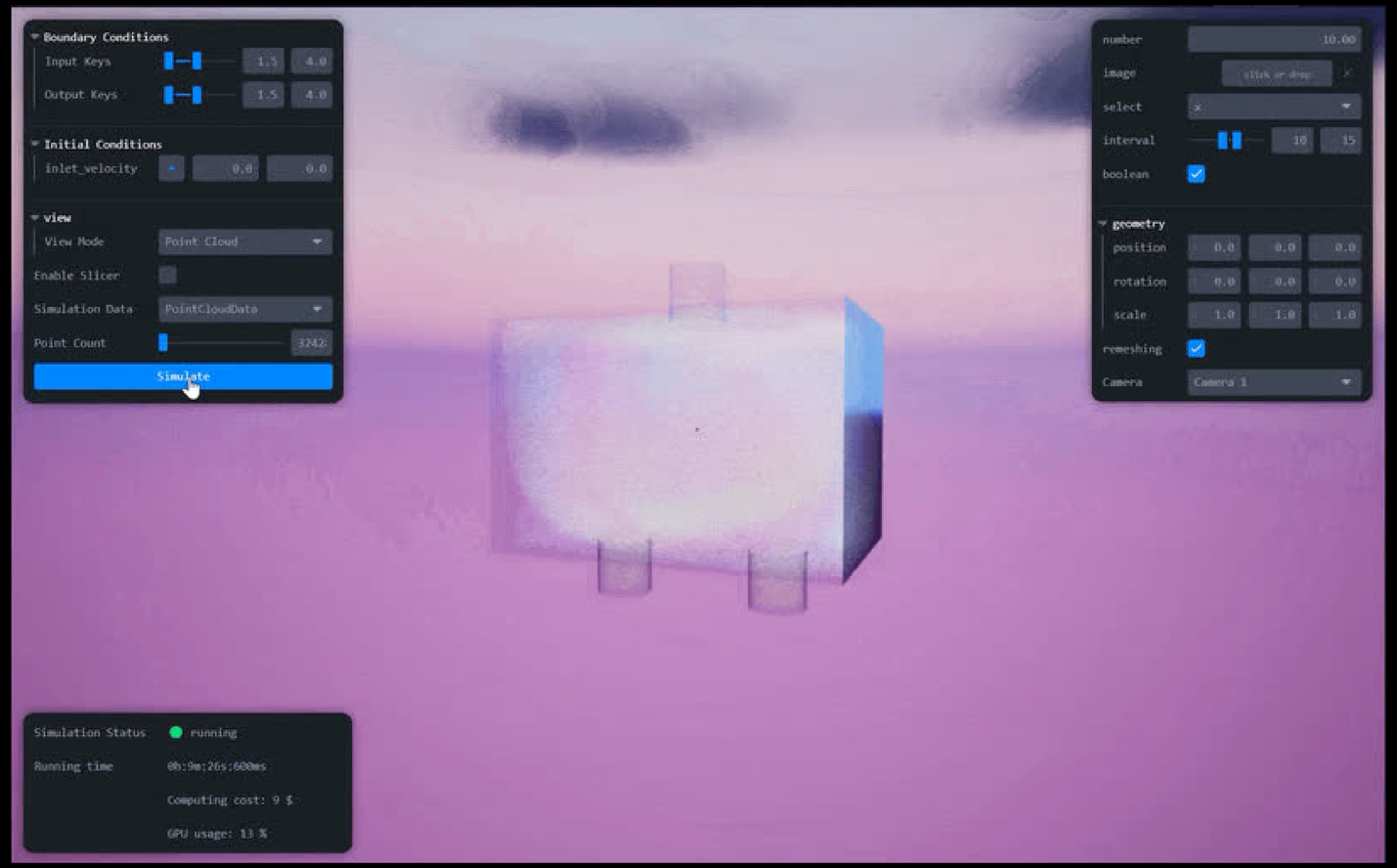
Running AI model training & inference workflows inside Siml.ai is billed on **“per-minute”** basis **while the server instance is running** in the cloud, **additionally** to the monthly/yearly subscription the user is paying.

PRODUCT / MODEL ENGINEER



- **Pre-built models** and examples
- **Bundled equations** for multiphysics, CFD, heat transfer, acoustics, seismics, electromagnetics; or **you can implement custom physics solvers yourself**
- **Easy-to-use** visual interface
- **No-code** / Low-code
- **One-click** access to robust cloud infrastructure for training AI models
- Build **interactive web apps** on top of our **Simulator Inference** & **Training Environment** (SITE)
- **Monitoring** dashboards
- **Dataset preparation**

PRODUCT / SIMULATION STUDIO



- **Interactive visualization tool** for numerical simulation and virtual physics experiments
- **Explore hundreds of variations** by running **simulations in seconds**
- **Automated optimization** of complex geometries
- Fastest way to build digital twins that need **real-time physics** simulation
- Support for **virtual and augmented reality** in Q4 2023

PILOT CLIENTS

DimensionLab is working with **Kovohuty Krompachy** to integrate Siml.ai into their workflow to achieve **10% cost reductions of metallurgical processes (~€100k/week)** and **process time reduction under 24 hour/cycle.**

Siml.ai helps **RFB**'s engineers **increase hydroplant's energy generation efficiency, optimize water structure endurance against strong floods.**

Siml.ai is being integrated into **TUKE**'s software library used by their researchers for **commercial and research simulations across metallurgy, aerospace, automotive, manufacturing, material science structural mechanics, and civil engineering**.

DimensionLab team developed a PoC **AI model for near-real-time predictive maintenance** of automatic gearbox, which is **5,000x faster than AUFEER Design's proprietary MATLAB-based model**.

Siml.ai was used to create AI simulator that can **analyze 10's of insulator materials** in for **multiple temperatures within seconds, reducing the time-to-market** of **Ecocapsule**'s new model v2.

Takeda Pharmaceuticals reached out to DimensionLab to develop **high-fidelity digital twin with integrated AI simulators** for **modularizing and speeding up their R&D process**.

PRODUCT VALUE AND GROWTH

AUFEER DESIGN

Data-driven AI model for predictive maintenance in the automotive industry:

- 99.77% prediction time reduction
- 430x faster (from ~6h to 50 secs) 99.88% reduction in compute costs 98.52% energy saved, (significant reduction of CO2 trace), unlocking near-real-time iteration times for hardware analysis
- Working on a joint collaboration with Škoda

ECOCAPSULE

Pioneering sustainable living spaces, adaptable to diverse environmental conditions:

- Optimized Heat Transfer in Ecocapsule v2
- Pre-trained simulator for fast experimentations with multiple material properties and outside temperatures between -25°C and +50°C
- 70% enhanced thermal efficiency
- 60% reduced energy consumption

160+ users of Siml.ai

480% growth since the alpha launch on July 3rd

127% growth

in newsletter subscribers since September

MEET THE TEAM

Co-founder & CEO

Michal Takac

13+ years SW engineering experience across various SaaS / crypto / metaverse / AI startups, co-founded 4 startups. PhD in Cybernetics. Slovak Student Personality of the Year 2021 in the category of metallurgy, engineering and energy.

💼 /in/michaltakac/

Co-founder & CFO

Peter Macinsky

Strategic manager. Peter is a serial entrepreneur in fintech with a strong IT background. Helped to start Solar Turbines (USA) collaboration with R&D team at Ness Košice.

💼 /in/macinsky

Co-founder & BizDev

Branislav Krsak

Academic consultant in 100+ international projects, PI in 27 projects, R&D commercialization facilitator.

💼 /in/branislav-krsak

Co-founder & VP Eng.

Martin Muzelak

Previously SW engineer at IBM. Finalist at IBM Hack 2019. 2nd place at Falling Walls Lab 2022, PhD. candidate in Cybernetics.

💼 /in/martin-muzelak

Head of R&D

Fouzia Adjalia

Pioneer researcher in the field of AI & robotics, ambassador for women in STEM with a particular focus on AI. Keynote speaker at major conferences.

🌐 fouziaadjailia.com
💼 LinkedIn profile

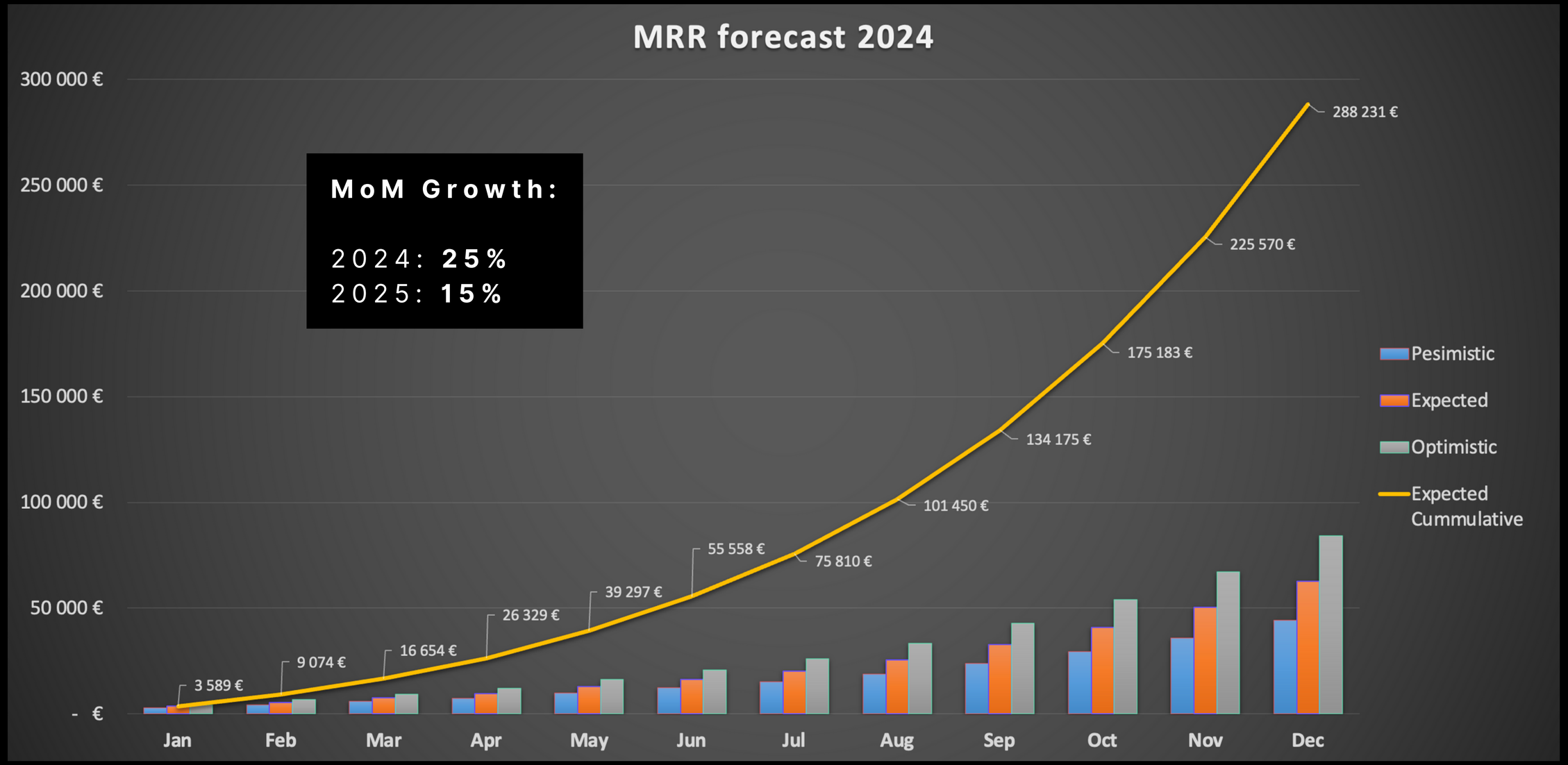
Senior SW Engineer

Maros Pekarik

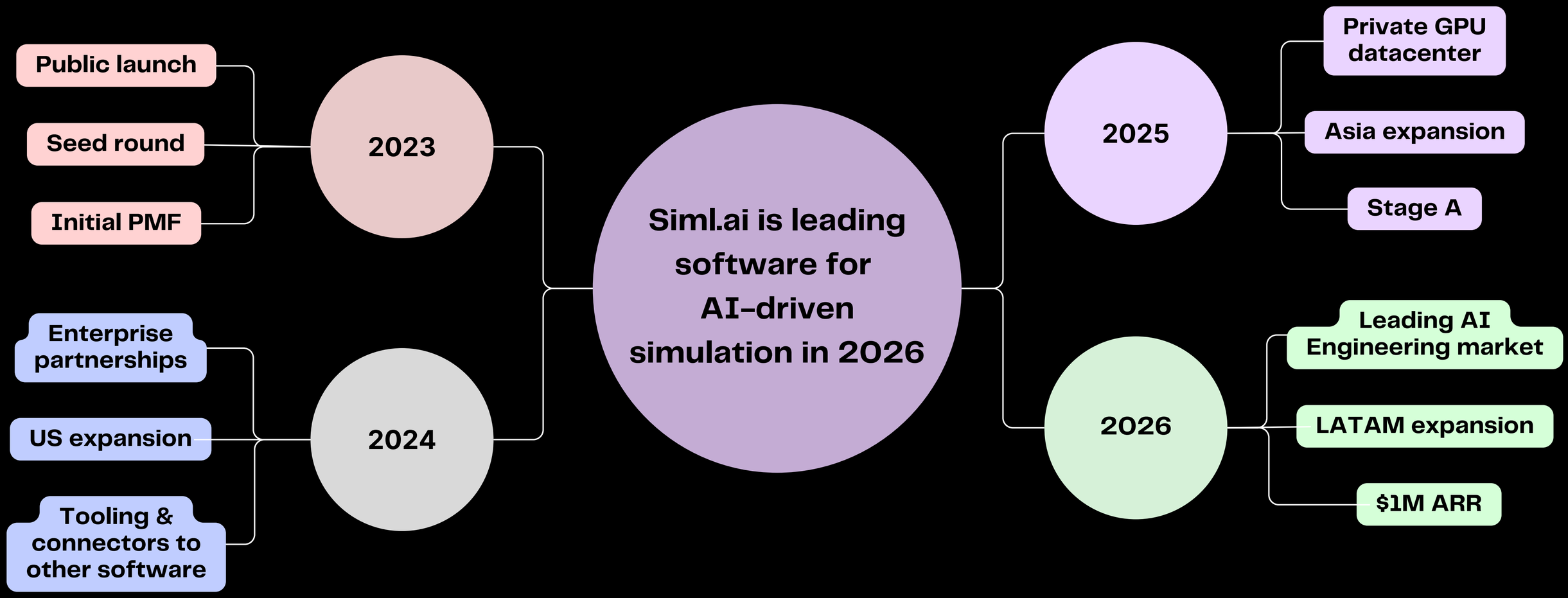
8+ years of experience in SW engineering and interaction design, specialist in virtual spaces and interactive design. Creative technologist active in robotics and immersive media art.

💼 /in/marospekarik

FINANCIAL PLAN



4-YEAR ROADMAP



WE ARE RAISING $2,5M SEED ROUND

1. **Expand team 14 → 25 team members**
   → +2 sales, +2 marketing, +2 customer support, +1 design, +2 software eng., +1 R&D, +1 assistant

2. **Establish US company for better worldwide presence**
   → Dedicated Sales Rep in location of interest (Silicon Valley / Austin / NYC)
   → US Entity establishment (Delaware C-Corp)

3. **Siml.ai v1.0 (full release is planned for Q2/2024)**
   Key features:
   → Building Digital Twins with integrated AI Simulation Engine
   → AR/VR Support for simulation inference
   → Users can build interactive customized web apps w/ embedded AI-driven Digital Twins
   → Connectors & integrations / plugins for connecting Siml.ai to established simulation software

4. **Goal to reach 5k users by the end of 2024**
   → 150+ paying users
   → 30+ enterprise clients (EU & US)

SimI.ai

Reach us at

michal@dimensionlab.org

Thank you!

Made by DimensionLab

Partners

NVIDIA INCEPTION PROGRAM

cb INVESTMENT MANAGEMENT

LEMONADE STAND

challenger ACCELERATOR

ClimAccelerator Baltics & Slovakia

eit Climate-KIC

Co-funded by the European Union