Gert-Jaap Glasbergen

Software Engineer

Digital Currency • High-Performance Systems • Generative AI

Netherlands • gertjaap@gertjaap.nl • gertjaap.org • in/gertjaap
gertjaap • gertjaapg • wadagso-gertjaap

SUMMARY

Software engineer with 25+ years of professional experience — coding since age 5, shipping production software since 14. I build at the intersection of **digital currency**, **high-performance distributed systems**, and **generative AI**: from central-bank digital currency research to payment infrastructure handling millions of transactions per second. Two decades growing from junior engineer to software architect leading international teams, followed by seven years as an independent consultant for clients ranging from startups to major financial institutions and the MIT Digital Currency Initiative.

PROFESSIONAL EXPERIENCE

Independent Consultant & Founder **2018 – Present**
Blocksource / Wadagso *Netherlands*

Founded **Blocksource** (2018) and co-founded **Wadagso** (2020), consultancies specializing in digital currency, distributed systems, and high-performance infrastructure. Selected engagements:

- **Radius Technology Systems** *(Distributed Systems Engineer, 2024–Present)* — Building payment systems that can handle millions of transactions per second for the agentic economy: sub-second finality and near-zero costs through parallel processing beyond traditional blockchain limitations, enabling AI agent-to-agent payments and compute-resource marketplaces.
- **Industry²** *(2026–Present)* — Building a locally hosted, open-source artificial intelligence system that learns from experience. [industry2.ai]
- **CBDC Prototyping for Major Financial Institutions** *(2022–2023)* — Under strict confidentiality, architected smart-contract systems for wholesale financial operations and built sophisticated UIs that made complex distributed-ledger systems accessible to decision-makers exploring tokenization and programmable money.
- **OpenCBDC PArSEC** *(Wadagso, 2022)* — Co-authored, with James Lovejoy, the PArSEC architecture (originally "3PC") that added generic smart-contract programmability to OpenCBDC: a Raft-replicated, runtime-locking key-value store with pluggable runners for Lua and the Ethereum Virtual Machine. Wrote the Geth-compatible JSON-RPC layer so unmodified Ethereum contracts and standard tooling work as a drop-in, plus the original user guide. Acknowledged in the PArSEC paper (up to 118K ERC-20 transactions per second on 128 hosts).
- **OpenCBDC / Project Hamilton** *(Wadagso, 2020–2021)* — Two years on Project Hamilton, the MIT Digital Currency Initiative's research project on a high-performance CBDC. Credited co-author of the open-source OpenCBDC transaction processor and primary author of the OpenCBDC Test Controller (over 80% of its commits): the system that orchestrates geo-replicated, multi-machine AWS benchmarks and produced the evaluation results in the Hamilton whitepaper (1.7 million transactions per second on the 2PC architecture). Also contributed to the atomizer and 2PC engines and a multi-threaded sentinel attestation pipeline. Acknowledged in the whitepaper.
- **Navier Inc** *(Contractor, 2020–2021)* — Architected Reactor, a high-performance hashrate proxy; the technology was acquired by DMG Blockchain Solutions.
- **MIT Digital Currency Initiative** *(Contractor, 2018–2019)* — Built the first demonstrable implementation of Discreet Log Contracts (oracle-based smart contracts; demoed at Fidelity Labs) and PoolDetective, a security monitor spanning 32 mining pools across 17 cryptocurrencies.
- **Sagittae** *(Contractor, 2018)* — Built the entire blockchain infrastructure for an Amsterdam startup reimagining insurance through Ethereum-based mutual risk-sharing societies.

Software Architect **2010 – 2018**
Decos *Netherlands*

Responsible for technical architecture and leading international teams.

- Led an engineering team in Pune, India to build the Customer Contact Center Platform from the ground up (C# .NET, Silverlight) through co-creation with five customers — the first Decos project to achieve full team autonomy.
- Built Minute, a meeting-management app, as a four-person internal startup — owning development, sales, marketing, and support end to end.

Software Engineer **2003 – 2010**
Decos *Netherlands*

- Worked as part of a small team on the migration from ASP/Visual Basic to C# .NET, building integrations with dozens of financial systems and web platforms; managed internal IT infrastructure (servers, VoIP, networks).

Junior Software Engineer **1998 – 2003**
Decos *Netherlands*

- Joined at age 14 via a summer job digitizing archives; earned a junior engineering role while still in high school, building utility programs in Visual Basic and ASP.

SELECTED PROJECTS & OPEN SOURCE

- **Verthash** — Co-developed a memory-intensive, ASIC-resistant mining algorithm (1.2 GB static dataset) that replaced Lyra2REv3 in the Vertcoin hard fork (Jan 2021). [PR]
- **Vertcoin One-Click Miner** — Democratized GPU mining via a deceptively simple interface (Go, Wails). [GitHub]
- **Discreet Log Contracts** *(MIT DCI)* — First demonstrable DLC implementation, built in six weeks; demoed at Fidelity Labs. [Demo] [Paper]
- **OpenCBDC** *(Project Hamilton)* — Co-author of the CBDC transaction processor and primary author of the Test Controller that benchmarked it at scale on AWS; acknowledged in the whitepaper. [GitHub] [Test Controller] [Whitepaper]
- **OpenCBDC PArSEC** — Co-developed the parallel smart-contract execution architecture (EVM and Lua runners, Geth-compatible RPC) for OpenCBDC; acknowledged in the paper. [Paper] [Code]
- **PoolDetective** *(MIT DCI)* — Monitored 32 mining pools across 17 cryptocurrencies to detect network-security anomalies. [GitHub]

EDUCATION & CERTIFICATIONS

BSc, Information Technology — The Hague University *(2003)*
Thesis: workflow management integrated into a document-management system.

Certifications & Training: Advanced Learning Algorithms (Coursera, 2025) • Supervised Machine Learning (Coursera, 2025) • Cryptography I (Stanford / Coursera, 2019) • Advanced Distributed Systems Design (Udi Dahan, 2013) • Matrix Management (Krauthammer, 2007).

TECHNICAL SKILLS

Languages	Rust, Go, C++, TypeScript, C# / .NET, SQL
Digital Currency	Distributed Ledgers, Smart Contracts, Consensus Algorithms, Cryptography, CBDC Architecture
High-Performance	Distributed Systems, Parallel Processing, Network Optimization, Cloud Infrastructure, Scalability
AI & ML	LLM Integration, Prompt Engineering, AI Infrastructure, Semantic Search, Vector Databases
Frameworks	React, Node.js, Docker, Kubernetes, PostgreSQL, Redis
Cloud	AWS, Azure, Google Cloud, DigitalOcean, Scaleway