

CSONGOR BARTUS

bartus.csongor@gmail.com | osequi.com

Europe | EEST timezone

Languages: Hungarian (Native), English (Expert), Romanian (Conversational)

PROFESSIONAL SUMMARY

Highly experienced (25+ years) Software Architect and Engineer with a unique focus on achieving "likely-correct software" through the application of formal and semi-formal methods (Ologs from Applied Category Theory, Finite State Machines).

Proven track record across the full software lifecycle, encompassing entrepreneurship (Co-founder/CTO of multiple ventures, including a successful e-commerce exit), technical leadership (managing teams up to 30+, overseeing regional operations for a Siemens company), and high-impact international consulting.

Expertise in state-of-the-art front-end development (React, TypeScript, Design Systems) and UI/UX design, complemented by a strong foundation in computer science and mathematics. Demonstrated ability to foresee technological shifts (early AI adoption in 2002) and adapt skills across diverse domains.

Driven by technical excellence, continuous learning, innovation over management, and contributing to meaningful projects with societal impact. Currently advancing junior-level AI Engineering skills, focusing on agent development using correctness-focused methodologies. Thrives in remote, asynchronous environments demanding high focus and independence.

SKILLS PROFILE

- **Core Expertise:**
 - **Software Architecture & Engineering:** Design patterns, system design, code organization, technical leadership (Master Level).
 - **Likely-Correct Problem Solving:** Applying formal (Ologs, FSM) and semi-formal (XState, Concept Design, Scientific Method) methods to software, writing, and AI.
 - **Front-End Development:** React (since 2018, expert-level understanding, optimizing for simplicity), TypeScript.
 - **UI/UX Design:** User experience principles, interface design, responsive web design, usability (Proficient Level).
 - **Design Systems:** Creation, maintenance, advocating for correctness in UI implementation (since 2015).
- **Methodologies & Concepts:** Component-Based Architecture, Functional-Reactive Programming, Declarative State, MVC, REST APIs, Agile principles, Rapid Iteration, Test-Driven Development (TDD), Model/Property-Based Testing, Technical Writing (Google Guide).

- **AI Engineering (Junior Level):** Prompt Engineering, AI Agent development (using State Machines/XState), strategic adoption based on reliability.
- **Technologies & Tools:**
 - **Frameworks/Libraries:** Next.js, (Historically: Ruby on Rails, Laravel, Yii, Borland Delphi). Selective use of 3rd-party libraries (preferring high-quality or essential ones like uuid, NextAuth, Radix).
 - **State Management:** Finite State Machines (XState), Context API, Effects.
 - **Data Fetching:** GraphQL, REST.
 - **Databases:** SQL (MySQL), (Historically: Various SQL implementations).
 - **Platforms/OS:** Web, UNIX/Linux, Windows, MS DOS.
 - **Version Control:** Git.
 - **CMS:** WordPress (past development).
- **Programming Languages:** JavaScript, TypeScript, React/JSX, HTML, CSS/SCSS, (Strong proficiency historically: Ruby, PHP, SQL, C++, C, Delphi, Java, Pascal, Basic, Assembly, VBA).
- **Soft Skills:** Remote Work Proficiency, High Independence, Asynchronous Communication (Written preferred), Project Leadership, Designer-Developer Collaboration, Technical Writing, Self-Learning, Adaptability, Critical Thinking, Problem Solving.

PROFESSIONAL EXPERIENCE

Independent Consultant, Software Correctness | osequi (Europe)

2020 – Present

- Founder of a self-run software research and development studio focused on formalism, correctness, cost, rapid iteration, and AI correctness.
- Developing and applying novel methodologies combining formal (Ologs, FSMs) and semi-formal (XState, Concept Design, Scientific Method) techniques.
- Creating studies and prototypes demonstrating "likely correct software" principles
- Applying methodologies to Web/Software development, Technical Writing, and AI Agent design.

Independent Consultant, UI/UX Designer & Senior Front End Developer | metamn (Europe)

2013 – 2022

- Provided UX/UI design and full-stack/front-end development consultancy to global clients (US, Singapore, UK, EU) at international market rates.
- Specialized in React, TypeScript, JavaScript, Design Systems, GraphQL, Component-based architectures, and Functional-reactive programming.
- Websites featured in online galleries (e.g., Brutalist Websites); work recognized by industry leaders.
- Authored blogs on design, development, and React (metamn.io/beat/, metamn.io/react/). Article "Tomorrowww" (2016) predicted AI's role in design.
- **Notable Engagements:**

- **Senior / Lead React Front-End Developer | Mtx.gg** (Silicon Valley Startup, ~30 employees): Mar 2022 - Sep 2022. Led React team, contributed to product design and software architecture alongside department leaders.
- **Senior / Lead React Front-End Developer | Lynx Solutions** (Software Company, 100+ employees): Nov 2019 - Sep 2020. Established React development culture, led team efforts, and actively contributed to projects.

Co-founder & CTO | Smuff (Targu Mures, Romania)

2006 – 2013

- Co-founded and led technology/product for a market-leading niche e-commerce company.
- Responsible for product, architecture, UI/UX design, software development (Ruby, RoR, PHP, Laravel, Yii, WordPress, MySQL), testing, and deployment.
- Achieved 44% customer retention rate and maintained 99.9% uptime.
- Company featured in national media for innovative products and Web 2.0 usage.
- Successfully exited the venture.

Co-founder | Arigato (Targu Mures, Romania)

2006 – 2008

- Co-founded an electronic music booking agency and event organizer with major partners (MTV Romania, Viacom Hungary, Sziget Festival).
- Organized ~100 events country-wide, including festivals with ~5,000 participants.
- Applied software engineering principles to event management and logistics.
- Venture shut down due to external political factors.

Regional Lead | Evosoft (Siemens Software Company) (Budapest, Hungary & Targu Mures, Romania)

2004 – 2006

- Led operations for an entire region within a large (500+ employees) software company.
- Collaborated with central and regional C-level officers on strategy and execution.
- Opened new offices, hired, and managed a team of 30+ developers.

Co-founder & CTO | Cathaia (Budapest, Hungary & Dublin, Ireland)

2002 – 2004

- Co-founded a startup developing an AI-based (Neural Networks, Bayesian Networks) network management system.
- Led a 10-person development team in Budapest, collaborating with a 4-person executive team in London/Dublin.
- Successfully raised seed funding in a nascent startup environment (2002).
- Technology concept was significantly ahead of its time; the company closed after failing to secure Series A funding.

Lead Software Developer & Sales Support Engineer | Consultronics (Budapest, Hungary)
1999 – 2002

- Led a team of <10 developers creating enterprise telecom software (Delphi, SQL, UNIX, Linux).
- Traveled globally as a Sales Support Engineer, frequently requested by clients for on-site technical problem-solving.

Software Developer & Assistant to CEO | Carat Intl (Brasov, Romania)
1997 – 1999

- Developed internal office software using Borland Delphi, SQL, and Microsoft Excel/VBA.
- Assisted the CEO while pursuing university studies.

EDUCATION

University of Transylvania (Brasov, Romania)
1995 – 1999

- **Major Degree in Computer Science:** Coursework included Computer Architecture, Operating Systems (DOS, Novell, Windows, UNIX), Database Systems (SQL), Data Structures & Algorithms, C, C++, Java, Borland Delphi.
- **Minor Degree in Mathematics:** Coursework included Algebra, Analysis, Geometry, Calculus, Probability & Statistics.

Computer Science High School (Romania)
1990 – 1994

- Specialized Computer Science curriculum.
- Won 1st place in the regional Informatics Olympiad.
- Learned Algorithms, Data Structures, Assembly, Basic, Pascal, C, C++.

PROFESSIONAL INTERESTS & WORKING STYLE

- **Core Drivers:** Meaningful work with societal impact (Education, Healthcare, Growth, Financial Stability), integrating multiple disciplines, technical excellence, innovation, continuous learning.
- **Working Style:** Prefers high-focus, deep work (optimal productivity ~25 hrs/week). Highly independent and autonomous, thrives in remote settings. Prefers asynchronous communication (writing), comfortable with minimal weekly meetings. Values productivity over performative "culture". Available for on-site/hybrid for teaching, consulting, presenting.
- **Personality Highlights:** Persistent, Growth-Seeking, Independent, Flexible, Agile, Critical, Creative, Curious (PrinciplesYou). Entrepreneur (ESTP-A), Explorer, People Mastery (16Personalities).