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MATTHEW KHOUZAM

PROFESSIONAL SUMMARY

Senior software engineer and product owner with over 20 years of experience spanning software development, open-source leadership, and technical product delivery. Extensive background in AI, distributed systems, software tooling, and software supply-chain security. Proven ability to lead cross-functional teams, collaborate with academia, government, and industry partners, and deliver complex products at scale.

CORE SKILLS

- **Leadership & Communication:** Public speaking, technical presentations, stakeholder engagement, video editing
- **Software Engineering:** C, C++, C#, Java, AI, ML, LLM integration, AI Tooling, Python, Assembly, OpenGL, DevOps, Distributed systems, Cloud computing, Cg, algorithms, Linux, Operating Systems, API Design, CyberSecurity, Performance engineering (profiling/tracing).
- **Soft Skills**: Collaboration, Teaching, Teambuilding, Agile, Mentorship, educational material.
- **Systems & Hardware:** Tracing, Embedded systems, microcontrollers, DSP, sensors, VHDL, debugging, Site Reliability Engineering.
- **Product & Delivery:** Product ownership, cross-functional coordination, roadmap execution

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PROFESSIONAL EXPERIENCE

ERICSSON CANADA

Product Owner
April 2021 – Present

- Automated compliance process and injected AI techniques into CI/CD to improve throughput.
- Lead a globally distributed team of 10 engineers and external consultants across three continents.
- Coordinate research and development partnerships with universities through CDAE, NSERC and PROMPT programs.

- Oversaw delivery of major Eclipse projects including Open-VSX, Eclipse Theia, and Eclipse Trace Compass.
- Co-lead the CDT Cloud project, aligning technical execution with long-term platform strategy.

Software Developer
January 2013 – April 2021

- Core committer/maintainer to Eclipse Trace Compass, delivering new features and performance improvements.
- Collaborated with academic partners to research and implement advanced tracing functionality.
- Improved code quality and reliability through systematic testing and debugging.
- Produced project media and delivered presentations at international conferences.

ECLIPSE FOUNDATION

Committer Director & Board Member
April 2022 – Present

- Represent committers within a multi-enterprise open-source foundation.
- Delivered multiple technical and strategic presentations at EclipseCon 2022.
- Led initiatives focused on improving software supply-chain security.
- Former lead of the Cloud Development Tools Working Group, setting strategic direction and fostering collaboration across member organizations.

ÉCOLE POLYTECHNIQUE DE MONTRÉAL / ERICSSON CANADA

Research Associate
April 2010 – January 2013

- Developed the LTTng analyzer for Eclipse, achieving a 400% performance improvement.
- Became an Eclipse Committer and implemented a Common Trace Format (CTF) parser optimized for large datasets with minimal memory usage.
- Presented research results at academic and industry conferences.

VANIER COLLEGE

Instructor *2010 :* Designed and taught C# programming and Fundamentals of computing.

ÉCOLE POLYTECHNIQUE DE MONTRÉAL

Laboratory Supervisor *2010:* Redesigned the laboratory curriculum for Introduction to Engineering.

ÉCOLE DE TECHNOLOGIE SUPÉRIEURE

Consultant *2009:* Designed a DSP laboratory for the TMS320C6713 course and produced comprehensive student documentation.

PRIOR EMPLOYMENTS

PolyCor Inc., Vyv Corp., CAE Inc., École Polytechnique de Montréal, Concordia University

EDUCATION

École Polytechnique de Montréal
Master of Engineering, Computer Engineering (2003 – 2006) GPA: 3.9

Concordia University
Bachelor of Computer Engineering (Major: Software)

LANGUAGES

English, French (fluent), Spanish (basic)

PUBLICATIONS

- *From Technical Excellence to Practical Adoption: Lessons Learned Building an ML-Enhanced Trace Analysis Tool,* Arxiv, 2025
- *Node Compass: Multilevel Tracing and Debugging of Request Executions in JavaScript-Based Web-Servers,* Arxiv 2023
- *DTraComp: Comparing distributed execution traces for understanding intermittent latency sources,* MDPI, 2024
- *Use of 3D Potential Field and an Enhanced Breadth-First Search Algorithm for the Path Planning of Microdevices Propelled in the Cardiovascular System*, IEEE EMBS, 2005.

INTERESTS

Freediving, underwater hockey and rugby, woodworking, volunteering, latin dance, molecular gastronomy, and continuous learning.