

# Dipl. Ing. -El. (HND, Liz.) Giovanni Binda, Resume

A Idastrasse 1, CH-8003 Zurich

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giovanni.binda@versatile.ch

Software R&D and System Engineer, Data Science Architect



I feel comfortable working with inter-disciplinary and international teams.

O L1 French

- L2 Italian
- $\odot$  C2 English
- $\odot$  C1 German

## ○ B1 Spanish

2019 (planned) TOGAF 9.2 Certified, The Open Group 2019 Professional SCRUM Master I, The Home of SCRUM 1982 - 1987 Dipl. Ing. -El. (HES, Liz.) Geneva University Switzerland

- Swiss & Italian (EU)
- 09.09.1966
- Single
- Extreme Trekking & Cycle Touring
- Philosophy, Yoga & music composition

#### **Core Competencies**

- Lean Development & System Design
- Requirements Engineering (Agile)
- Managing IT Organizations, Project Stakeholders and Dev. Teams
- Solution Design & Compliance

#### Profile

- Problem Solving, Soft. Programming
- SQA & Optimization, Test Procedure
- Marketing in Events and Publications
- Development of MVP and Prototypes
- Contribute with hands-on code
- 15+ years ICT Engineering in the Process Manufacturing, Operation Management, AEC/FM and higher education, with deep expertise in their many processes.
- 15+ years international experience of software system design, lean product and architecture development using mit TOGAF, SCRUM, Lean startup, CMMI, SQA, Hermes, SDLC, ISO/IEC 15288, RUP, UML DevOps CI/CD -practices.
- 15+ years of experience with in-depth understanding of databases and analytics, including Big data (Hadoop, Spark), NoSQL, business analytics, relational, cybersecurity, databases (SQL Server, MySQL, Postgre, Oracle), data warehousing.
- 15+ years of software design and programming full-stack & embedded C/C++, server-side Java, C#, Python, client-side Javascript, W3C Web API, GNU Glib, Win32, Linux and real-time OSs.
- 15+ years of consultative/complex technical and deployment projects in industry helping top-management in solution findings, managing various stakeholder relationships and get consensus on solution/projects.
- Significant knowledge of machine learning, data science and big data use-cases, Hadoop-based design patterns and real time/stream analytics.
- Deep understanding of enterprise and cloud computing technologies, with a focus on enterprise data management, integration and analytics, and their business drivers, emerging computing trends and impacts on organizations.
- Proven track record of coaching and supervising system development teams, driving productivity and securing solutions to achieve business alignment.
- Oversight experience on major transformation projects and successful transitions to implementation support teams.
- Experience using SPSS, Matlab, R, Shiny, Jupyter for data science and analytics in Risk Management and Decision Support solutions for the enterprise.

## 10 YEARS OF INDUSTRIAL MANUFACTURING & AUTOMATION IN R&D

- C/C++ Full Stack Programming
- Embededd Software
- Real-time Microsystems
- Quality Assurance



#### 5 YEARS OF PRODUCT INNOVATION & SERVICES

- Deterministic Control Systems
- Industrial Networking, DCE
- IoT, IoS, Edge Computing
- C/C++ Teaching to professionals



### 15 YEARS OF ENGINEERING, DEVOPS MNGMT, EU APPLIED RESEARCH

- EIM, MDM Applied Research
- AEC/FM, ICT & Data Science
- HPC & Distributed Computing
- Cloud Computing & Cyber-Security





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"A dream you dream alone is only a dream. A dream you dream together is reality." - Yoko Hono

Market opportunities, add value, and solve meaningful real-world problems. I analyze companies' needs and develop strategy to generate value from data.

**CALCENTION Senior ICT Engineer & Data Science Architect,** I lead the *Machine and business intelligence Competence Center* (3+ FTEs). Initiate an Industry 4.0 program enabling data-driven business intelligence across all our operations, accelerate the discovery of insights and build business intelligence capabilities for Preventive Maintenance & Assistance, Malfunction Detection of rolling stock. Develop the enterprise data model, e. g., maps the systems and interfaces used to manage data, sets standards for data management, do gap-analysis and migration planning. Define specifications for *Industrial real-time IoT Edge Computing platform and secure communications system* adapted to harsh unsecure environments.



09.2013-04.2017 **Lead Architect & HPC Platform Manager** of the *Data Science & HPC Cloud Platform*. Lead and contribute to all the stages of the development and adoption process from planning through execution to deployment of the *Super-Computing (HPC) Data Center*, working closely with

stakeholders, coordinating internal and external Project partners and experts. Leading the *HPC Engineering Competence Group* (3+ FTEs) to manage service end-to-end availability and performance with direct responsibility for uptime record. Support top management in solutions finding, manage stakeholders, develop and assess architecture vision, set technical objectives, coordinate business units to use components of data science and architecture, set principles, models, methods and maintain platforms of data curation and management. Address computing requirements, data flow, data management, reliability and operational costs. Plan and guide architecture migration and manage change. Support researchers to *translate and optimize their algorithms to C/C++ 11*, use datastructures and -models to compute efficiently on *massively parallel processors array and embedded distributed processing systems*.



01.2003-04.2017 **Research Assistant and EU-Project CTO**, I lead the R&D of *state-of-the-art Information Technologies*, with the full accountability for MVP in Applied Research Digitalization Projects, leading up to 7 EU-wide teams (15+ FTEs). Identify objectives and mission statements for research and

development, define project objectives, setting goals for each group by setting responsibilities, objectives, accountability and measures through agreement and delegation. Plan activities and identify resources, including finances, communication and IT. Manage and execute architecture development and review, monitor new trends and directions of technology, methods & applications. Lead multi-cultural and inter-disciplinary teams and supervise team productivity and coach team members, develop their skills to reach project goals. Elicit and unify implementation standards & best-practices. Manage system architecture, release processes (*DevOps, CI, CD*) and devise test procedure & deployment planning. Acquire and execute application-oriented research projects. Do market and group-oriented marketing of research and project results in events and publications and teach at Master's level as well as in the continuing education (CAS).

VISCOM Visual Communications AG 07.1997-01.2001 **Senior Software Development Engineer.** Develop *stateof-the-art of distributed process control systems*. Offer expertise to our clients to customize our products in their plants. Implement hardware and software

simulator and model (SIL-simulation) for many large industrial system plants and communication protocols for various systems. Microsoft Certified with a large expertise of *Closed-loop Quality Assurance, Time Sensitive Industrial Networking, DCS, SCADA* and teach *C++ real-time system programming and distributed computation* to professionals and customers.

09.1989-05.1997R&D Software and Hardware Engineer. I design and<br/>develop intelligent conveyors and advanced instruments for the Quality Assurance and<br/>Production of watch movements. Strong Experience in Embedded Microsystems,<br/>Industrial Automation, Machine Perception, Artificial Vision and Cyber Physical Systems (CPS).