

SIMONE VALENTINI (Milan)

AI Solution Architect | Agentic AI & Cloud Architect | Telecom & Complex Systems

PROFESSIONAL SUMMARY

AI Solution Architect with over 25 years of experience in large-scale telecommunications and more than 10 years in applied Machine Learning and Artificial Intelligence.

I design and deliver end-to-end AI systems for complex, mission-critical environments, where data, models, cloud architecture and operational constraints must work together. My background combines deep hands-on technical expertise with strong domain knowledge in telecom networks and large-scale systems.

I have worked across international and multicultural contexts, acting as a technical reference for engineering and business stakeholders, and supporting the adoption of AI solutions through robust architectures, governance and innovation initiatives.

PROFESSIONAL EXPERIENCE

Kybername – Milan

Founder | November 2025 – Present

- Architected a "Digital Compass" on Telegram, leveraging Agentic AI to bridge the gap between advanced technology and humanistic wisdom (Philosophy).
- Conceptualized and designed a cognitive framework that applies philosophical principles to AI interactions, aimed at helping users find clarity, purpose, and motivation.
- Leading the end-to-end development of the beta phase, managing the transition from architectural design to a scalable, user-centric AI agent.
- Strategic focus: demonstrating the ability to manage the full AI lifecycle, from concept to production, while integrating ethical and human-centric principles as a differentiator for leadership and innovation-oriented roles.

Sky Italy – Milan

AI Solution Architect | October 2021 – Present

- Designed and owned the end-to-end architecture for broadband capacity network modelling and forecasting, integrating data ingestion, feature engineering, model training, deployment and monitoring in a production-grade environment.
- Architected and deployed Agentic AI and LLM-based solutions on Google Cloud Platform (Vertex AI, Gemini API, ADK), enabling decision-making workflows for complex network planning and operational scenarios.
- Industrialized data science solutions through robust MLOps practices, implementing CI/CD pipelines, model lifecycle management and monitoring/observability mechanisms to reliably bridge experimentation and enterprise-scale deployment.
- Defined architectural standards and reference patterns aligned with business direction and needs for scalable, reliable and maintainable AI systems, balancing model performance, latency and costs.

- Acted as a technical reference point across data science, engineering and business teams, translating business needs into AI system architectures and guiding cross-functional stakeholders toward effective adoption of AI-driven solutions.

Nokia – Milan

Senior AI and Machine Learning Architect | January 2017 – September 2021

- Led the architectural design of AI-driven predictive maintenance systems for live 4G/5G mobile networks, focusing on KPI anomaly detection, alarm forecasting and proactive network optimization.
- Designed and implemented Machine Learning frameworks for automatic performance control, combining statistical analysis and supervised learning techniques to optimize network node configurations in large-scale, real-time environments.
- Worked at the intersection of AI, network engineering and operations, translating complex telecom requirements into scalable and maintainable AI system architectures deployed on live networks.

Nokia – Milan

Innovative Service Solution Architect | October 2015 – December 2016

- Designed the architecture of innovative 4G and 5G services, integrating intelligent analytics, predictive optimization and automation capabilities for telecom and IoT use cases.
- Supported pre-sales and customer engagements by translating advanced AI and analytics concepts into concrete, deployable service architectures aligned with customer needs.
- Collaborated with international customers and internal stakeholders across Europe and beyond, acting as a bridge between technology, business objectives and service delivery.

Nokia – Milan

Delivery and Solution Project Manager | February 2001 – September 2015

- Managed end-to-end delivery of mobile network projects (GSM, UMTS, LTE), coordinating costs, timelines, resources and customer interfaces across multiple countries.
- Led international, cross-functional teams in complex rollout, modernization and network acceptance programs throughout Southern Europe.
- International leadership experience (Greece, Spain, France, Israel and Italy).

Siemens ICN – Milan

Software Engineer | June 1998 – January 2001

- Designed and developed real-time embedded software for GPRS and UMTS systems, building a strong foundation in large-scale, mission-critical telecommunications systems.

EDUCATION

Master Digital Innovation and Big Data (50 hours 2023) - 24 Ore Business School

MBA in Innovation Management (2003) – Sant’Anna School of Advanced Studies, Pisa

M.S. Degree in Electronic Engineering (1997) – University of Padua

CERTIFICATIONS

Google Professional Cloud Architect (December 2024)

Project Management Professional (PMP)

ITIL Foundation

Technical Certifications (2018-2022): Python Foundation & Orange Belt, Data Science Programming, Data Science Machine Learning, Data science Deep learning, Linux Green & Purple Belts, Object Oriented Programming (C++, Java), Git.

TECHNICAL AND SOFT SKILLS

- AI & Machine Learning: Agentic AI, Deep Learning (CNN, LSTM, Transformers, VAE), NLP, Reinforcement Learning, Pattern Recognition, Time Series (ARIMA, Prophet, sktime, GluonTs), Statistics, quality control, Random Forests, SVM, XGBoost, Transformers, Markov Chain, Density Estimation.
- Frameworks & Libraries: TensorFlow, Keras, Scikit-learn, PyTorch, Pandas, NLTK, Statsmodels
- Cloud & MLOps: Google Cloud Platform (Vertex AI, Gemini, BigQuery, Mysql, Firestore, Pub/Sub), Docker, Kubernetes, Airflow, CI/CD pipelines, MLOps, Model lifecycle Management, Monitoring and Observability, Distributed System, Virtualization, Security, Service Oriented Architecture (SOA)
- Architecture Patterns: Service Oriented Architecture (SOA), Microservices, Cloud-Native Design
- Data Engineering & Analytics: SQL, Spark, Scala, Hadoop, Data Visualization (Grafana, Data Studio, Tableau, Arcadia), Big Data management.
- Languages & Tools: Python, C/C++, Java, Git, MATLAB, R, Linux scripting (Centos, Kali, Ubuntu, Red Hat), Anaconda, Pycharm.
- Soft skills: Agile/Scrum, thought leadership, critical and strategic thinking, innovation mindset, international experience.
- Domain Expertise: 4G/5G Networks, Broadband Networks, IoT, SDN/NFV, Predictive Maintenance, Network Optimization, Network Planning, Network Operation, Service Assurance KPI Management.

PUBLICATIONS

- “I sei elementi per una strategia aziendale efficace”, 2009, ISBN 978-1-4092-5412-6.
- “The Importance of being IT”, Economia Aziendale Online, 2008.
- “Innovative Supply of Services Intended for S.M.E Through Bank Branches”, Economia Aziendale, 2007.

LANGUAGES

Italian: Native

English: Fluent

Milan 30/01/2026

Simone Valentini