# Simone Montali

### Summary

Highly skilled software engineer with a strong foundation in machine learning and a passion for building impactful products. Proven track record of delivering **complex ML systems** and driving significant business growth.

# Experience

#### Meta (July 2025 - Present)

July 2025 - **Senior ML Software Engineer**, *Meta Reality Labs*Present

- Lead development of new data engine supporting Reality Labs team working on foundation models for VR
- Build robust ML infrastructure and design efficient data pipelines for large-scale model training
- Implement state-of-the-art vision-language models (VLMs) spanning computer vision and VR applications
- Create extensive automation systems to streamline ML workflows and model deployment processes
- Drive significant business impact by enabling researchers to iterate faster while improving model quality and performance

#### **Google (May 2022 - end of June 2025)**

May 2024 - **ML Software Engineer**, YouTube Shopping Recommendations Quality Present

- Improved worldwide product CTR by around 3% 6 months after joining the team
- Leading cross-organization, cross-geo project on LLM embeddings for Shopping videos
- Currently the first PR author (by delta and PR number) in a team of 9 people, 3rd in the organization.

May 2022 - **ML Software Engineer**, *TuneLab Studio* May 2024

- Founding engineer for TuneLab Studio, a unified ML/LLM platform now responsible for training over 50% of models at Google.
- Developed a user-friendly platform for LLM fine-tuning, inference, and prompt engineering, empowering teams across Google to leverage LLMs in their products.
- Owned the TuneLab Studio analytical and quality stack (TLS Vault), a critical infrastructure for data-driven decision-making, leading multiple designs and refactors.
- Reduced 88% of the latency on the analytical platform AutoTFX Explorer, used by the team for quality experiments (hundreds of model trainings running every day), by leading a redesign of

its APIs.

- Spearheaded the integration of TuneLab Studio with M2P (Model-to-production), enabling seamless one-click deployment of large language models to Servomatic, Google's highperformance model serving platform.
- Recognized for outstanding contributions, ranking among the top 22% highest performers at Google in 2022 and earning a promotion in 2023.
- Enabled a \$100M revenue uplift for Google's sales team by launching the first fully automated and checked-in ML pipeline for the global publisher intelligence team.

#### Sinfonia Media (July 2017 - May 2022)

July 2017 - **Consultant/developer** May 2022

- Delivered full-stack solutions and ML projects as a consultant and developer, working directly
  with stakeholders and tech teams to achieve measurable impact for medium-sized Italian companies.
- Implemented projects using TensorFlow, React, JavaScript, PHP, WordPress, Node.js, Python, and Scikit-learn, showcasing a diverse technical skillset.
- Managed a CentOS 8 VPS with almost-continuous uptime, ensuring high availability and reliability for client applications.
- Proactively identified and integrated bleeding-edge technologies to meet client requirements and enhance project outcomes.

#### Skills

- Machine Learning: Strong foundation in machine learning, deep learning, and reinforcement learning (RL), with experience in both classic ML and cutting-edge research.
- Large Language Models (LLMs): Expertise in LLM infrastructure, fine-tuning, inference, prompt engineering, and deploying LLM-based products.
- **Full-stack Development:** Proficient in full-stack development with experience in Python, C++, Java, SQL, TensorFlow, Keras, and Angular.
- DevOps and Infrastructure: Managed cloud infrastructure (CentOS 8 VPS) with near-continuous
  uptime and experience deploying and maintaining ML models and web applications in production
  environments.
- Collaboration and Communication: Excellent communication and collaboration skills, demonstrated through knowledge sharing, teamwork, and clear communication of technical concepts.

#### Education

Artificial Intelligence M.Sc., Alma Mater Studiorum, Bologna, Italy

Graduated with 110/110 cum laude. Maintained a GPA of 4.0/4.0 while working full time. Research focus: Machine Learning, Deep Learning, Reinforcement Learning, Natural Language Processing.

**Artificial Intelligence M.Sc. (Exchange Student)**, *Vrije Universiteit, Amsterdam, Netherlands* 

Research focus: Reinforcement Learning and Deep Learning. Successfully completed a  ${\sf C2}$  English exam.

Computer Engineering B.Sc., Università di Parma, Parma, Italy

Graduated **cum laude with 110/110**. Maintained a GPA of 4.0/4.0 over the 3 years while working part-time.

## Feedback

- o "**It's been years** since I've seen an engineer who, given a problem, proposes varied / creative solutions. Many stay in their comfort zone or ignore scaling problems." M.M., YT Shopping
- o "...not only did he accomplish the work required to operate the [NTK], but also **automated and improved the ops by a margin of magnitude**." D.A. direct manager
- o "His clear communication keeps **everyone informed and ensures efficient use** of meeting time for focused discussions on next steps and troubleshooting." A.F. (L5 TPM)
- "...went above and beyond to deeply understand the problem space to think of solutions beyond core coding!" - N.A. (L5 SWE)