Gabriele Angeletti

Software Engineering Leader with 6+ years of experience driving the development of innovative software solutions, from initial concept to large-scale deployment. Expertise spans the full technology stack, including React, TypeScript, Go, Python, and cloud platforms (GCP, AWS). Proven ability to lead teams, architect complex systems, and deliver impactful results, including scaling a startup to over 1 million users and launching a mission-critical product from the ground up. Seeking to leverage deep technical knowledge and a passion for AI/Machine Learning to build cutting-edge products in a dynamic and challenging environment.

Experience

Lead Engineer, Aver — Jan 2024 – Jun 2025

- Engineered a robust and scalable software platform to replace a legacy system plagued with technical debt, eliminating costly downtime, drastically improving performance, and modernizing operations for 80+ employees.
- Eliminated significant financial losses due to system downtime, streamlined sales reporting from minutes to seconds, and replaced error-prone manual spreadsheet processes with automated, integrated solutions.
- Led a team of three, leading all technical aspects of the project, in building a platform capable of handling thousands of daily transactions and supporting a monthly turnover in the millions of pounds.

Senior Software Engineer, Vital — Feb 2022 – Jan 2024

- As the first full-time engineer, played a pivotal role in building the engineering team and establishing core engineering practices, laying the foundation for a platform that scaled to over 1 million users.
- Designed and implemented a robust data pipeline using Pub/Sub to handle asynchronous processing of millions of daily events; subsequently, engineered the migration of TBs of time-series data, comprising over 15 billion individual data points, from a partitioned PostgreSQL database to a highly scalable Bigtable environment.

Senior Software Engineer (part-time), Larki — Sep 2020 – Feb 2022

- Architected a data pipeline able to align Lidar point clouds coming from a combination of ground and aerial sensors.
- Implemented and reproduced results from various research papers on 3D object detection/segmentation, such as PointNet, with the goal of extracting semantic information from point clouds.

Software Engineer, Lyft — Oct 2018 – Jan 2020

- Led a project building a distributed data pipeline that creates 3D world maps from large-scale imagery data, running an internally developed version of Structure From Motion (SfM).
- Implemented a novel algorithm for automatic detection and 3D placement of traffic lights in 3D maps.
- Designed continuously updated dashboards with custom metrics to monitor point cloud quality, leading to a significant reduction in errors and increased data reliability.
- Developed an internal Angular web app to visualize real-time driving patterns at scale.

Research Engineer, Blue Vision Labs — Jan 2018 – Oct 2018

- Engineered a robust pipeline enabling large-scale testing and evaluation of 3D mapping and localization algorithms across diverse datasets.
- Developed and maintained cloud infrastructure (AWS) to support distributed 3D mapping pipelines operating at scale.
- Experimented with deep learning models for specific tasks (e.g., feature extraction and matching) within the 3D mapping pipeline to assess potential quality improvements.

Research Engineer intern, Blue Vision Labs — Aug 2017 – Dec 2017

- Investigated and evaluated deep learning models as potential replacements for the SIFT algorithm to enhance 2D feature detection performance.
- Built a scalable AWS Redshift data store to efficiently index and query metadata for large volumes of imagery data.

Other experience (2014-2017)

- Part-time work on different projects during university as a full-stack web developer.
- Student at InnovAction Lab, an entrepreneurship course on how to create a startup and pitch ideas to investors.

Education

Sapienza University of Rome, 2015 – 2017
M.Sc. in Engineering in Artificial Intelligence and Robotics, (English Degree)
Final grade 110/110
Thesis: *Adaptive Deep Learning through Visual Domain Localization*

Sapienza University of Rome, 2011 – 2014
B.Sc. in Engineering in Computer Science and Automation, (Italian Degree)
Final grade 106/110
Thesis: *Statistical analysis of mobile apps reviews to improve users' QoE*

Technologies

Programming languages

- **Python**: (6+ years) Extensive experience building backend systems, data pipelines, and managing large codebases.
- **Go**: Significant experience developing robust web services and APIs.
- **TypeScript/JavaScript**: Proficient in building modern web applications and backend services.

Frontend development

- Frameworks/Libraries: React, Next.js, Mantine
- Deployment: Vercel

Cloud Platforms

- GCP: Extensive experience with BigQuery, BigTable, Cloud Run, Cloud Functions, Cloud Storage, Pub/Sub, IAM.
- AWS: Extensive experience with Redshift, S3, Lambda, EC2, ECS, Batch.
- DevOps & Infrastructure: Docker, Terraform, Pulumi, GitHub Actions, Buildkite.

Databases

- Relational: PostgreSQL (extensive experience)
- NoSQL: BigTable (experience with large-scale time series data) and AWS Redshift

AI & Machine Learning

- PyTorch, Scikit-Learn

Projects

Deep Learning TensorFlow: Curated collection of ready-to-use implementations for various Deep Learning algorithms and architectures using TensorFlow

Publications

G. Angeletti, T. Tommasi, B. Caputo. "Adaptive Deep Learning through Visual Domain Localization". In: *IEEE International Conference on Robotics and Automation (ICRA)*(2018)

Languages

Italian - native speaker.

English - full proficiency with near-native fluency.

French - fluent in speaking and reading, with developing writing abilities.

Spanish - conversational.

Honors

NASA International SpaceApps Challenge 2015
Local winner (Rome) & Global winner for category Galactic Impact
Project: CROPP—Cultures Risks Observation and Prevention Platform

Activities & Hobbies

Trail running, hiking, rock climbing, scuba diving.