

Gabriele Angeletti



Experience

Lead Engineer, Aver Jan 2024 – Present

- Spearheaded the end-to-end development of software to manage the company's operations across warehouse logistics, stock control, sales, purchases, invoicing, and finance.
- Led a team of three, taking charge of all the technical aspects of the project, from picking the stack to building the infrastructure and coding, resulting in software 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

- Played a key role as the first full-time engineer outside of leadership. Collaborated closely with founders to establish engineering practices and contribute to the foundational development of the core infrastructure.
- Led efforts that successfully scaled the company's user base from 700 to over 1M, handling over 15B individual data points.

Senior Software Engineer (part-time), Larki Feb 2021 – Feb 2022

- Design and develop a system to automatically align Lidar point clouds from a variety of sensors.
- Research on 3D object detection/semantic segmentation approaches to extract information from point clouds.

Software Engineer, Lyft Level 5 Oct 2018 – Jan 2020

- Led the project to develop a distributed data pipeline, efficiently running large-scale Structure From Motion (SfM) on hundreds of millions of images.
- Implemented an innovative algorithm for automatic detection and 3D placement of traffic lights in imagery data, increasing the accuracy of point cloud generation.
- Designed and implemented dashboards to consistently monitor the quality of SfM point clouds, reducing errors and increasing the reliability of data analysis.
- Developed an internal web application capable of visualizing driving patterns in real-time at scale.

Research Engineer, Blue Vision Labs Jan 2018 – Oct 2018

- Design of a data pipeline to automate the testing and evaluation of 3D mapping and localization algorithms.
- Work on the cloud infrastructure to run distributed 3D mapping at scale.
- Research: test the use of deep learning at different stages of the mapping pipeline to improve quality.

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

- Research: replacing SIFT with deep learning to improve 2D feature detection.
- Design and build a data lake with AWS Redshift to store imagery metadata.

- Implementation of algorithms to evaluate the 3D mapping system.

Freelancer, 2014 – 2017
Part-time work on different projects during university as a full-stack web developer.

Student, InnovAction Lab Spring 2013
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* ¹

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 of experience managing large codebases in dynamic, high-pressure settings.
- **Go:** 2 years of experience developing diverse microservices.

- **Cloud**

- GCP: extensive experience mainly on BigTable, BigQuery, CloudRun, Cloud-Functions, CloudStorage, and IAM.
- AWS: extensive experience with key services including Redshift, S3, Lambda, EC2, ECS, and Batch.

- **Data Pipelines and Databases**

- Extensive experience with PostgreSQL, BigTable, and Redshift database systems.
- Proficient in Spark, Airflow, and Luigi for data pipeline construction.

- **Front-end development**

- Basic knowledge of React and TypeScript.

- **DevOps**

- Skilled in Docker, Terraform, Pulumi, BuildKite, and GitHub Actions.

Projects Deep Learning TensorFlow ²: Ready to use implementations of various Deep Learning algorithms 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) ³

¹<https://github.com/blackecho/master-thesis>

²<https://github.com/blackecho/Deep-Learning-TensorFlow>

³<https://arxiv.org/abs/1802.08833>

Languages	Italian - native speaker.	
	English - full proficiency with near-native fluency.	
	French - fluent in speaking and reading, with developing writing abilities.	
Honors	Ranked 13 / 2189 among Python github users in Italy by ⁴	2018
	Winner of Accenture Digital Hackathon Rome	2016
	NASA International SpaceApps Challenge	2015
	Local winner (Rome) & Global winner for category Galactic Impact Project: CROPP—Cultures Risks Observation and Prevention Platform ⁵	
Activities & Hobbies	Surfing, scuba diving, climbing, running, hiking.	

⁴<http://git-awards.com/>

⁵<https://2015.spaceappschallenge.org/award/>