

Francesco Dondi

The guarantee of experience, the enthusiasm for good engineering.

Latest version of this CV at: dondi.fyi/p/cv_en

Online (React) version of this CV at: <https://fdondi.github.io/cv-react/>

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in francesco-dondi

Fdondi

Born 29/10/1990

Italian citizen, C permit

Married, no children



Who I am

As a seasoned software developer, I bring a wealth of experience in developing robust software solutions. The post-Covid time has been hectic, but my diverse professional background gave me the experience to be immediately effective with all types of tools and processes. Now however I'm aiming at a stable position where I can grow long-term. I'm known among my peers and supervisors for being a reliable, intelligent, and friendly colleague, one who is always ready to take on responsibility and contribute to the team's success.

2020-current: Startup experiences

- 09/2024 - 01/2025 **Senior Machine Learning Engineer, Giotto AI**
Contributed to cutting-edge research tackling the ARC challenge. Especially focused on data augmentation. Extensively used BART for classification, and Pytorch/Lightning for efficient multi-GPU training.
- 03/2024 - 05/2024 **Senior Software Engineer, Deep Impact**
Had the opportunity to have direct experience of Computer Vision, both on cloud and edge embedded devices (Nvidia Jetson platform). Contributed by overhauling Docker setup and solving bugs.
- 03/2023 - 09/2023 **Senior Software Engineer, DoubleCloud**
Developed infrastructure around ClickHouse SQL, deploying with Salt-Stack, Helm and Terraform. Go for Telegraf plugins.
- 06/2021 - 09/2022 **Senior Software Engineer, Firebolt**
Developed the SQL optimization engine and testing infrastructure.
 - Expanded supported SQL syntax and optimizations
 - reworked the test framework to support new test suite
 - contributed to rewriting to higher standards the optimization engine
- 08/2020 - 02/2021 **Software Developer and Quantitative Analyst, F-Trust**
 - Maintained and developed a Trading Engine (C++)
 - redesigned, implemented and migrated storage (PostgreSQL)
 - extracted and integrated data from multiple log streams
 - analyzed data to highlight opportunities for improvement (Julia)

2017-2020: Google

- 10/2017 - 05/2020 **Senior Software Developer, Google**
Within Search, productionized an initially experimental tool (C++).
 - Improved runtime from days to hours
 - added support for new kinds of data
 - made the results easily visualizable and monitorable
 - made onboarding orders of magnitude faster for most cases

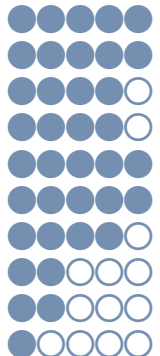
2015-2017: Initial Experiences

- 04/2016 - 10/2017 **Software Developer, Ascent Software**
I helped maintain and develop a driver (C++) for automotive communications, running both on regular computers and embedded (QNX real-time OS) systems.
- 04/2015 - 04/2016 **Junior Developer, Rulex Inc. /CNR**
Explored options for speeding up C algorithms with CPU (OpenMP) and GPU (Nvidia CUDA) parallelization. MATLAB algorithms to Python.

Skills

Programming

C++
- C++/Abseil
- C++/Boost
Python
SQL
- Clickhouse SQL
- PostgreSQL
Java
Julia
Go



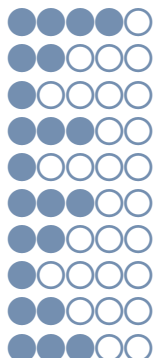
Universal Tools

BASH
Git
Jenkins CI



Advanced Tools

Docker
Terraform
Helm
gRPC
ZeroMQ
Valgrind
Flamegraph
Gstreamer
Nvidia CUDA
OpenMP



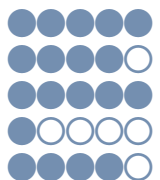
Platforms

Linux
AWS
Windows
Nvidia Jetson



Competences

Testing
DevOps
Design Docs
Embedded Dev.
Agile Dev.



Languages

English
Italiano
Deutsch
Français



Formal education

02/24–11/24	CAS ETH in Machine Learning in Finance and Insurance , <i>ETH Zürich</i>
2009–2015	Galileian School of Higher Education , <i>University of Padua</i> , Enriching program, 98/100
2012–2014	Master Degree in Mathematics , <i>University of Padua</i> , 108/110
2009–2012	Bachelor Degree in Mathematics , <i>University of Padua</i> , 110/110 <i>cum Laude</i>
2004–2009	High School - Science Track , added IT, French, <i>Liceo Fermi</i> , Bologna, 100/100 <i>cum Laude</i>

Continuous Learning

Programming languages

Aug 2024	<i>GitHub</i>	J.P. Morgan Python training	React	●●○○○○
Aug 2024	<i>Linkedin</i>	React.js Essential training	Rust	●●●○○○
May 2024	<i>Linkedin</i>	gRPC in Python	C#	●●●○○○
May 2024	<i>Linkedin</i>	Design Patterns for Rust	Financial Python	●●●○○○
Mar 2024	<i>Linkedin</i>	C# and .NET Essential Training	Java	●●●●○○
Jan 2024	<i>Linkedin</i>	Designing RESTful APIs	MATLAB	●●●○○○
Nov 2023	<i>Linkedin</i>	C# Essential Training 1: Types and Control Flow	C Embedded	●●●○○○
Nov 2023	<i>Linkedin</i>	C Programming for Embedded Applications	gRPC	●●○○○○
Oct 2023	<i>Linkedin</i>	Learning MATLAB	REST	●○○○○○
Jan 2023	<i>Linkedin</i>	Rust Essential Training		
Jan 2023	<i>Linkedin</i>	Level Up: Java		
Dec 2022	<i>Linkedin</i>	First Look: Rust		

Design, documentation and communication

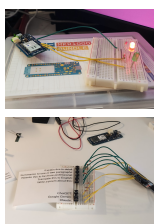
Aug 2024	<i>Linkedin</i>	Communicating Time Boundaries	UML	●●○○○○
Jun 2024	<i>Linkedin</i>	Software Design: Modeling with UML	Business planning	●●●○○○
Feb 2023	<i>Linkedin</i>	Software Architecture: From Developer to Architect	Software Arch.	●●●●○○

Cloud and DevOps

Feb 2023	<i>Linkedin</i>	AWS Certified Solutions Architect - Associate (SAA-C02)	AWS Cloud	●●●●○○
Jan 2023	<i>Linkedin</i>	DevOps Foundations: Going Cloud Native	DevOps	●●●○○○
May 2020	<i>Linkedin</i>	Cloud Architecture: Advanced Concepts (2019)		

Projects

Embedded



Nov 2023	BTC Arduino monitor github.com/Fdondi/arduino-btc Board blinking green for increased bitcoin price, red for decrease. Blinks faster for fast price change.	C++ Embedded	●●●○○○
Aug 2024	AI Keyboard github.com/Fdondi/ai_keyboard A keyboard to perform various operations with LLMs with one click. Working on Bluetooth connection.	Arduino Embedded Development Electronics Embedded connectivity (USB, WiFi/SSH, Bluetooth LE)	●●○○○○ ●●○○○○ ●●○○○○ ●○○○○○

Competitions

ongoing	Leetcode , https://leetcode.com/u/Fdondi/	
ongoing	Kaggle , https://www.kaggle.com/litecoin	
2024	Codility Pi Challenge , Silver Award	
19-20/Mar/2016	H-Farm , <i>H-Ack Food</i> , Reinventing the 'Bio food' experience.	
12-13/Dec/2015	H-Farm , <i>H-Ack Luxottica</i> , Ideas for the future of glasses.	
2009	Italian Olympics of Mathematics , Gold 🏆	
2008	Italian Olympics of Information Technology , Bronze 🏆	

Personal

Hobbies:
Read, hike, bike, swim.