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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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 the numerous experiences have allowed me to gain familiarity with all kinds of tools and processes. Now, however, I'm aiming at a stable, in-office 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 SaltStack, 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**, *ETH Zürich*

2009–2015 **Galileian School of Higher Education**, *University of Padua*, Enriching program, *98/100*

2012–2014 **Master Degree in Mathematics**, *University of Padua*, *108/110*

2009–2012 **Bachelor Degree in Mathematics**, *University of Padua*, *110/110 cum Laude*

2004–2009 **High School - Science Track, added IT, French**, *Liceo Fermi*, Bologna, *100/100 cum Laude*

Continuous Learning

Programming languages

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

React ●●○○○
Rust ●●●○○
C# ●●●○○
Financial Python ●●●○○
Java ●●●●○
MATLAB ●●●○○
C Embedded ●●●○○
gRPC ●●○○○
REST ●○○○○

Design, documentation and communication

Aug 2024	*Linkedin*	**Communicating Time Boundaries**
Jun 2024	*Linkedin*	**Software Design: Modeling with UML**
Feb 2023	*Linkedin*	**Software Architecture: From Developer to Architect**

UML ●●○○○
Business planning ●●●○○
Software Arch. ●●●●○

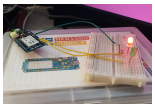
Cloud and DevOps

Feb 2023	*Linkedin*	**AWS Certified Solutions Architect - Associate (SAA-C02)**
Jan 2023	*Linkedin*	**DevOps Foundations: Going Cloud Native**
May 2020	*Linkedin*	**Cloud Architecture: Advanced Concepts (2019)**

AWS Cloud ●●●●○
DevOps ●●●○○

Projects

Embedded



Nov 2023 **BTC Arduino monitor** github.com/Fdondi/arduino-btc
Board blinking green for increased bitcoin pirce, red for decrease. Blinks faster for fast price change.

Aug 2024 **AI Keyboard** github.com/Fdondi/ai_keyboard
A keyboard to perform various operations with LLMs with one click. Working on Bluetooth connection.

C++ Embedded ●●●○○
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**, *H-Ack Food*, Reinventing the 'Bio food' experience.

12-13/Dec/2015 **H-Farm**, *H-Ack Luxottica*, 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.