Francesco Dondi

Curriculum Vitæ

Resident 8810 Horgen, Zürich canton
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✉ francesco314@gmail.com
in francesco-dondi
♨ Born 1990, Italy, Italian citizen
➕ Swiss C permit until 30.09.27
🌐 German B2 planned Mar 2024

Professional Experience

03/2023 - 09/2023 **DoubleCloud** Fully Remote	**Software Developer**

Maintained and developed the infrastructure around managed ClickHouse, in particular:

- Secured metrics server by adding Nginx
- Improved SaltStack configuration
- Solved bugs in Telegraf Go plugins

○ 🖊 C++ ○ ☁ AWS storage
○ 🖊 Go ○ ⚙ Docker
○ 🖊 Bash ○ ⚙ Jenkins CI
○ 🗄 ClickHouse SQL ○ ⚙ Nginx
○ ᛘ Git ○ ⚙ SaltStack
○ △ Linux, Bash

06/2021 - 09/2022 **Firebolt** Fully Remote	**Software Developer**

Maintained and 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

○ 🖊 C++
○ 🖊 Python
○ 🗄 Firebolt SQL
○ ᛘ Git
○ ☁ AWS storage

08/2020 - 02/2021 **F-Trust** Zug / 50% Remote	**Developer / Analyst**

- Maintained and developed a Trading Engine (C++)
- redesigned, implemented and migrated product storage (PostgreSQL)
- extracted and integrated data from multiple log streams
- analyzed said data to highlight opportunities for improvement (Julia)

○ 🖊 C++ ○ △ Linux
○ 🖊 Julia ○ △ Bash
○ 🗄 PostgreSQL ○ △ SSH
○ ᛘ Git ○ △ VIM
○ ◗ Data Science ○ △ Screen

10/2017 - 05/2020 **Google** Zürich / 10% Remote	**Software Developer**

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

○ 🖊 C++ ○ ◗ DevOps
○ 🖊 Python ○ ◗ Design Docs
○ 🗄 Google SQL ○ △ Linux
○ ᛘ internal ○ 🖊 Bash
○ ⚙ Valgrind ○ ⚙ Kubernetes
○ ⚙ Flamegraph

04/2016 - 10/2017 **Ascent Software** Luqa(Malta)	**Software Developer**

Bridging from internal API to new device API for automotive.

○ 🖊 C++ ○ ◗ Agile development
○ ◗ Embedded development ○ ᛘ Git

04/2015 - 04/2016 **Rulex Inc./CNR** Genova (Italy)	**Junior Developer**, Genua (Italy)

Reworked C/MATLAB algorithms for OpenMP/CUDA parallelization

○ 🖊 C ○ 🖊 MATLAB
○ ⚙ Nvidia CUDA ○ 🖊 Python

Education

2023 H1	**From Data to Decisions**, *Imperial College Business School*
2009–2015	**Galileian School of Higher Education**, *University of Padua*, Enriching program for gifted students, *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, with added French and IT**, *Liceo E. Fermi*, Bologna, *100/100 cum Laude*

Skills

Programming languages

Primary	**High Performance**	C/C++ (up to C++20)
	Advanced Scripting	Julia
	Database	SQL (PostgreSQL)
Confident	Java, C, Javascript, BASH, Python, MATLAB	
Interested in	Rust, F♯, Go, Scala, Haskell	
Frameworks	Polymer, Abseil, Boost, Nvidia CUDA, OpenMP	

Tools

Organization	OKRs, Agile, Test Driven Development
Writing	Technical and collaborative documents
Editors	Vim, Visual Studio, Eclipse, TexMaker for LaTeX, [Google internal]
Versioning	Git, SVN, [Google internal]
Debug	GDB, Valgrind, [Google internal]
Profiling	Valgrind, Flamegraph
Orchestration	[Google Internal], Docker/Docker-Compose, SaltStack
Data presentation	Google Data Studio, Julia Plot modules

Language

Italian	Mother tongue	
English	Advanced	*110/120 TOEFL, daily use*
German	Intermediate	*B2 level planned from Mar 2024*
French	Good	
Arabic	Beginner	*Wife teaching me*

More

Awards

2014	GRE test score: Verbal 165 ($95°$ percentile), Quantitative : 170 ($98°$ percentile), Analytical: 4.0 ($56°$ percentile
2009	Italian Olympics of Mathematics: Gold
2008	Italian Olympics of Information Technology: Bronze
2006	Special mention in high school literary prize "Le ali dell'Ippogrifo"

Hackatons

12-13/12/15	H-Farm H-Ack Luxottica: ideas for the future of glasses.
19-20/03/16	H-Farm H-Ack Food: reinventing the 'Bio food' experience.