# Francesco Dondi

Curriculum Vitæ

8810 Horgen, ZH +41 76456 50 32 ☑ francesco314@gmail.com in francesco-dondi **W** Born 1990, Italy, Italian citizen **■** Swiss C permit until 30.09.27 **⊕** German B1



## Professional Experience

## 06/2021 - 09/2022 **Software Developer**

Firebolt Maintinaing and developing the SQL optimization engine and testing infrastructure.

Fully Remote

- Expanded supported SQL syntax and optimizations
- o reworked the test framework to support new test suite
- o contributed to rewriting to higher standards the optimization engine

### 08/2020 - 02/2021 **Developer / Analyst**

- **F-Trust** O Maintained and developed a Trading Engine (C++)
- Zug / 50% Remote  $\odot$  redesigned, implemented and migrated product storage (PostgreSQL)
  - o extracted and integrated data from multiple log streams
  - o analyzed said data to highlight opportunities for improvement (Julia)

# 10/2017 - 05/2020 **Software Developer**

**Google** Within Search, productionized an initially experimental tool (C++).

Zürich / 10% Remote

- Improved runtime from days to hours
- o added support for new kinds of data
- o made the results easily visualizable and monitorable
- o made onboarding orders of magnitude faster for most cases

#### 04/2016 - 10/2017 **Software Developer**

**Ascent Software** Bridging from internal API to new device API for automotive.

Luqa(Malta)

04/2015 - 04/2016 **Junior Developer**, Genua (Italy)

Rulex Inc./CNR Reworked C/MATLAB algorithms for OpenMP/CUDA parallelization

Genova (Italy)



## Education

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 Borg (model of Kubernetes) Data presentation Google Data Studio, JULIA Plot modules Language 2022-2023 In-person intensive course, level A2-B1, German, Zürich 2018 In-person private course level A2, German, Zürich 2009 English course with Home-stay, English, York 2005 Cultural exchange, French, Marseille Levels Italian Mother tongue English Advanced 110/120 TOEFL French Intermediate Good understanding, understandable conversation German Good B1 level More **Awards** 2014 GRE test score: Verbal 165 ( $95^{\circ}$  percentile), Quantitative : 170 ( $98^{\circ}$  percentile), Analytical: 4.0  $(56^{\circ} \text{ percentile})$ 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.