



# Francesco Dondi

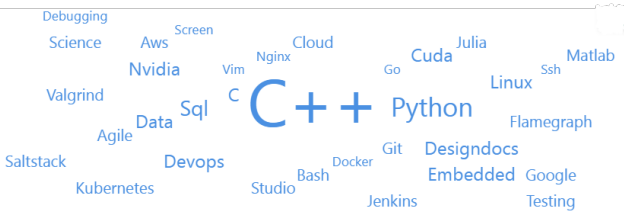
 Born 29/10/1990, Bologna, Italy,  Italian citizen  
 Married, no children

Latest version of this CV at:  
[github.com/Fdondi/cv-latex/blob/main/cv\\_en.pdf](https://github.com/Fdondi/cv-latex/blob/main/cv_en.pdf)

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 Fdondi  
 C permit until 30/09/27



The guarantee of experience, the enthusiasm for good engineering.



## Experience

|   |  |
|---|--|
| 09/2023 - Current   | <b>Growth time</b><br>Restarted intensive German study. First personal embedded development project (Arduino). Experimented with LLMs, including: prompt engineering, created a CustomGPT to assist with German learning; architecture, discovered the details of transformer structure and parameter efficient training; learnt to run language models locally, especially Mistral. |
| 03/2023 - 09/2023<br><b>DoubleCloud</b><br>Company size: 50-100 | <b>Software Developer</b> , Zürich<br>Maintained and developed the infrastructure around managed ClickHouse, in particular: <ul style="list-style-type: none"><li>Secured metrics server by adding Nginx</li><li>Improved SaltStack configuration</li><li>Solved bugs in Telegraf Go plugins</li></ul>   |
| 10/2022 - 02/2023   | <b>Personal Time</b><br>Got married, organized celebrations across two continents. Moved house. Started studying German intensively. Sailed for a week for the first time. Decided to take Data Science certification (see Education).   |
| 06/2021 - 09/2022<br><b>Firebolt</b><br>Company size: 50-100    | <b>Software Developer</b> , Zürich<br>Maintained and developed the SQL optimization engine and testing infrastructure. <ul style="list-style-type: none"><li>Expanded supported SQL syntax and optimizations</li><li>reworked the test framework to support new test suite</li><li>contributed to rewriting to higher standards the optimization engine</li></ul>                    |
| 08/2020 - 02/2021<br><b>F-Trust</b><br>Company size: 5          | <b>Developer / Analyst</b> , Zug <ul style="list-style-type: none"><li>Maintained and developed a Trading Engine (C++)</li><li>redesigned, implemented and migrated product storage (PostgreSQL)</li><li>extracted and integrated data from multiple log streams</li><li>analyzed said data to highlight opportunities for improvement (Julia)</li></ul>                             |
| 10/2017 - 05/2020<br><b>Google</b><br>Company size: 100.000     | <b>Software Developer</b> , Zürich<br>Within Search, productionized an initially experimental tool (C++). <ul style="list-style-type: none"><li>Improved runtime from days to hours</li><li>added support for new kinds of data</li><li>made the results easily visualizable and monitorable</li><li>made onboarding orders of magnitude faster for most cases</li></ul>             |
| 04/2016 - 10/2017<br><b>Ascent Software</b>                     | <b>Software Developer</b> , Luqa, Malta<br>Bridging from internal API to new device API for automotive.  |
| 04/2015 - 04/2016<br><b>Rulex Inc. / CNR</b>                    | <b>Junior Developer</b> , Genua, Italy<br>Reworked C/MATLAB algorithms for OpenMP/CUDA parallelization   |

## Languages

|          |                      |
|----------|----------------------|
| English  | Fluent professional  |
| Italiano | Madrelingua          |
| Deutsch  | B1, B2 geplant 03/24 |
| Français | Bon                  |

## Programming

|                  |       |
|------------------|-------|
| C++              | ●●●●● |
| - C++/Abseil     | ●●●●● |
| - C++/Boost      | ●●●●○ |
| SQL              | ●●●●● |
| - Clickhouse SQL | ●●●●● |
| - PostgreSQL     | ●●●●○ |
| Python           | ●●●●● |
| Julia            | ●●○○○ |
| Go               | ●○○○○ |

## Tools

|               |       |
|---------------|-------|
| BASH          | ●●●●○ |
| Linux         | ●●●●○ |
| Windows       | ●●●○○ |
| Visual Studio | ●●○○○ |
| AWS storage   | ●●○○○ |
| Docker        | ●●●○○ |
| Git           | ●●●●● |
| Jenkins CI    | ●●●○○ |
| SSH           | ●●●○○ |
| VIM           | ●●●○○ |
| Valgrind      | ●●●○○ |
| Flamegraph    | ●●○○○ |
| Nvidia CUDA   | ●●○○○ |
| OpenMP        | ●●●○○ |

## Competences

|               |       |
|---------------|-------|
| Testing       | ●●●●● |
| Debugging     | ●●●●○ |
| DevOps        | ●●●●○ |
| Design Docs   | ●●●●○ |
| Embedded Dev. | ●○○○○ |
| Agile Dev.    | ●●●●○ |

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## Formal education

- 2023 H1 **Business Analytics: From Data to Decisions**, *Imperial College Business School*
- 2009–2015 **Galileian School of Higher Education**, *University of Padua*, University-level 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, added IT, French**, *Liceo Fermi*, Bologna, 100/100 *cum Laude*

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## Continuous Learning

### Data Science/Analytics



- Nov 2023 **Data Fluency: Exploring and Describing Data**, *Linkedin*, Barton Poulson  
how to prepare and adapt data, explore it visually, and use statistical methods to describe it, going in depth on probability and interference. Also touching on data ethics and explainable AI. Thinking with data; preparing data; adapting data; exploring data; describing data; understanding probability and inference.    
- Nov 2023 **Power BI Essential Training**, *Linkedin*, Gini von Courter, 3h 45m  
Data types in Power BI. Visualizations in Power BI. Outcomes when changes are made within Power BI and Power BI Desktop. Dashboards vs reports within Power BI. User roles within a workspace in Power BI. Workspaces and tools within the Power BI mobile application.  
- Oct 2023 **Business Intelligence for Consultants**, *Linkedin*, Joshua Rischin, 29m  
Determine the essentials of business needs. Recognize the fundamentals in reviewing source data. Break down the meaning behind data-driven insights.  
- Oct 2023 **Data Analytics for Business Professionals**, *Linkedin*, John Johnson, 1h 16m  
Real-life analytics in action. Predictive and prescriptive approaches. Formulate and pose your own questions. Collect, clean, and aggregate data from different sources. Identify when data is flawed.    
- Oct 2023 **Excel: Economic Analysis and Data Analytics**, *Linkedin*, Michael McDonald, 2h 17m  
Using regression analysis, confidence intervals, and forecasting tools with your company's key performance indicators (KPIs), building your skill set in data analytics to better meet the needs of your business.    
- Oct 2023 **The Non-Technical Skills of Effective Data Scientists**, *Linkedin*, Keith McCormick, 44m  
New data scientists must be able to empathize, persuade, and lead others if they want to successfully run projects that produce business transformation.  

### AI and LLMs





### Programming languages

- Nov 2023 **C# Essential Training 1: Types and Control Flow**, *Linkedin*, Matt Milner, 2h 38m  
C# in context; .NET, MSIL, and the Base Class Library. Fundamental patterns of C# from control flow to enums and switch matches.  
- Oct 2023 **Learning MATLAB**, *Linkedin*, Steven Moser, 1h 13m  
MATLAB tools to model data and hypotheses  

### Embedded development

- Nov 2023 **C Programming for Embedded Applications**, *Linkedin*, Eduardo Corpeño, 2h 5m  
Deliver applications that are small, efficient, and fast for the Internet of Things. Memory, storage, power limitations, and hardware awareness.  

### Cloud and DevOps

- Feb 2023 **AWS Certified Solutions Architect - Associate (SAA-C02) Cert Prep: 1 Cloud Services Overview**, *Linkedin*, Tom Carpenter, 1h7m  
AWS services, security solutions of AWS, AWS regions and availability.  
- Jan 2023 **DevOps Foundations: Going Cloud Native**, *Linkedin*, Karthik Gaekwad, 45m  
The information senior executives —CTOs, vice presidents, and chief architects— need to know to embrace cloud native.  




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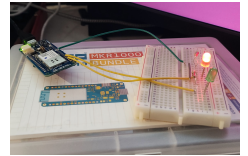
## Projects

### Embedded

Nov 2023 **BTC Arduino monitor**, <https://github.com/FdonDi/arduino-btc>

A bot checking Bitcoin prices and blinking a green led if the price is above average, red if below. The speed of blinking depends on the magnitude of the change.

-  Embedded C++
-  Arduino
-  Embedded web API



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## 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.