

# Gioele Guenzi

Master's Student in Computer Science

## Personal Information

**Date of Birth:** August 18, 1997  
**Address:** Via Beati 110, Castelletto S. Ticino, NO, Italy  
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**Languages:** Italian (native), English (proficient)  
**Driver's License:** B (own vehicle)



## Education

**High School Diploma:** Scientific High School (OSA track), Liceo E. Fermi, Arona (NO), Italy

**Degree:**

- Bachelor's Degree in Computer Engineering, Politecnico di Milano
- Master's Student in Computer Science, University of Milan

**Courses/Certifications:**

- ECDL Certification, 2016
- Science Communication Course, Politecnico di Milano, 2022
- Harmony and Instrumentation Course, ANBIMA VCO and Turin, 2021 - 2022
- Musical Conducting Course, ANBIMA, 2024

## Work Experience

**IT Technician:** CIIA SNC, Borgomanero (NO), 2016

- System Administrator
- Full-Stack Developer

**Private Tutor,** 2017 - present

- Mathematics
- Physics
- Computer Science
- Electronics and Electrical Engineering

**Software Engineer:** Freelance, 2017 - present

- Development of PC, mobile, and web applications
- Website development

**Teacher:** I.I.S. Carlo Alberto dalla Chiesa, Sesto Calende (VA), 2023 - 2024

- Computer Science
- Electronics and Electrical Engineering

## Projects

**PortaVento,** 2021 - present

*Creation of educational content on music, history, and science, with a particular focus on pipe organs. Writing/editing and producing educational videos in both long and short formats.*

**Skills acquired:**

- Writing and editing
- Audio and video production
- Social media management: YouTube, Instagram, TikTok

**Links:** [youtube.com/@ilPortaVento](https://youtube.com/@ilPortaVento), [instagram.com/ilportavento](https://instagram.com/ilportavento), [tiktok.com/@ilportavento](https://tiktok.com/@ilportavento)

**Technologies used:** DaVinci Resolve, GIMP, Audacity, YouTube Studio, TikTok Studio, Instagram.

**Music Sheet Database, 2023 - present**

*Online platform for browsing and managing digital sheet music, supporting multiple file formats.*

**Skills acquired:**

- Development of responsive web applications
- Database design and optimization for sheet music storage
- Google API integration

**Technologies used:** HTML, CSS, JavaScript, MusicXML, Google APIs.

**Setticlavio, 2024**

*Interactive educational software for learning the seven clefs, developed for the "Programming for Music" course at the University of Milan.*

**Skills acquired:**

- Object-oriented programming (OOP) in a musical environment
- Music notation graphics rendering and interaction
- Integration of an audio engine for note playback

**Technologies used:** Java, JavaFX, MIDI, Audio Processing

**SolFaDo, 2023**

*Interactive generator of sight-reading exercises for students, supporting various clefs.*

**Skills acquired:**

- Development of responsive web applications
- Implementation of an automated exercise generation system based on MusicXML
- Use of libraries for interactive rendering of digital sheet music

**Link:** [gioele.me/solfado](https://gioele.me/solfado),

**Technologies used:** HTML, CSS, JavaScript, MusicXML, OpenSheetMusicDisplay.

**Twitch Interactive Bot, 2021 - 2023**

*Interactive bot for Twitch, capable of handling custom commands, retrieving game information (e.g., Valorant, League of Legends), and integrating with StreamElements.*

**Skills acquired:**

- Object-oriented programming (OOP) and event-driven development
- API integration (Twitch, StreamElements, Riot Games)
- Custom command parsing and chat interaction management
- Data persistence and dynamic configuration handling

**Technologies used:** Node.js, Python, Twitch API, StreamElements API, Riot Games API, HTTP Requests.

**BDRoad, 2020 - 2022**

*Co-founder of a food-delivery startup, multi-platform app, and backend infrastructure. Full-stack development and project management.*

**Skills acquired:**

- Development of mobile and web applications
- Cloud database management and API development
- Client relations

**Technologies used:** Flutter/Dart, Node.js, Python, Google Cloud, Firebase.

**Memory Processing Unit, 2022**

*Implementation of a data processing unit with memory management and a Mealy finite state machine, using VHDL. Project developed as part of the "Logic Networks" course at Politecnico di Milano.*

**Skills acquired:**

- Design and simulation of digital circuits
- Implementation of Mealy finite state machines (FSM)
- Memory management and read/write operations
- Debugging and optimization of VHDL code

**Technologies used:** VHDL, Vivado, FPGA.

**Master of Renaissance, 2021**

*Digital adaptation of the board game "Maestri del Rinascimento" by Cranio Creations. Project developed as part of the "Software Engineering" course at Politecnico di Milano.*

**Skills acquired:**

- Design and development of complex software applications
- Object-oriented programming (OOP) and application of design patterns
- Client-server architecture development
- Graphical user interface design
- Unit and integration testing

**Technologies used:** Java, JSON, JavaFX, Sockets, Multi-threading, OOP, Design Patterns.

**edU, 2020**

*Implementation of an advanced version of the "ed" text editor, featuring infinite undo and redo support. Project developed as part of the "Algorithms and Principles of Computer Science" course at Politecnico di Milano.*

**Skills acquired:**

- Development and optimization of algorithms
- Implementation of efficient data structures
- Debugging and memory management

**Technologies used:** C

## Skills

**Technical Skills:**

- Productivity applications: Microsoft Office Suite, LibreOffice Suite, Google Suite
- Programming languages: C, C++, C#, Java, Python, JavaScript, PHP, Dart/Flutter, SQL, HTML, CSS, Arduino, VHDL
- Development tools and environments: Visual Studio Code, IntelliJ IDEA, PyCharm, CLion, Eclipse, Vim, GitHub
- Operating Systems: Linux, Windows
- Cloud Computing: Google Cloud, AWS
- Database management systems: MySQL, PostgreSQL, Firebase Real-Time Database
- CAD Systems: Inventor, Fusion 360
- Video editing software: DaVinci Resolve, VEGAS Pro
- Music notation software: MuseScore
- Other: 3D printing (resin and filament)

**Soft Skills:**

- Problem-solving and critical thinking
- Communication
- Teamwork
- Leadership
- Flexibility/Adaptability
- Creativity
- Empathy
- Teaching skills and educational material development
- Proficiency in using technological tools
- Proficiency in using AI tools

## Volunteer Activities

**Music Teacher:** Corpo Musicale "A. Broggio" , Castelletto S. Ticino, 2022 - present

- Musical instruments (trombone, euphonium, tuba)
- Music theory
- Conducting

**Active Member SFY:** Stresa Festival Young, Stresa, 2023 - present

**Link:** [stresafestival.eu](http://stresafestival.eu),

- Planning and organizing live concerts
- Association board member

**Choir Member:** Harmonycum, Invorio, 2023 - present

**Link:** [gioele.me/harmonycum](http://gioele.me/harmonycum),

- Choir member and association treasurer
- Assistant conductor

## Extracurricular Activities

Cooking and teaching Italian cuisine to foreigners

Composition and arrangement of pieces for choir and/or wind band

**Musician:**

- Municipal bands: Castelletto Sopra Ticino, Arona
- Provincial bands: Junior Band NO-VC, Junior Band VCO, Senior Band VCO

**Choir Member:**

- Coro CAI "La Rocca" di Arona, 2017 - 2022