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# Davide Glafiro

## Software Engineer

[github.com/glafiro](https://github.com/glafiro)

[glafiro.dev](https://glafiro.dev)

Italy  
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## SKILLS

- **Programming Languages:** C, C++, JavaScript, Python, PHP, GLSL
- **Web Technologies:** HTML, CSS, Node.js, React, Web Audio API, WebGL
- **Frameworks and Libraries:** JUCE, Arduino, OpenGL, OpenCV, raylib, Godot
- **Version Control:** Git
- **Multimedia and Graphics Tools:** Blender, Adobe Illustrator, Adobe Photoshop, Figma
- **Audio and Music Production:** Ableton Live, Steinberg Cubase, Reaper
- **Other:** Firmware development, digital signal processing, problem-solving, self-directed learning

## PROJECTS

### Attila - Multiband Distortion

Developed "Attila", a 3-band distortion and bitcrushing plug-in for Windows, macOS, and Linux, made using the JUCE framework.

**Technologies Used:** C++, JUCE Framework, DSP concepts, Illustrator

**GitHub:** <https://github.com/glafiro/trio>

### Space Chili - Delay and Chorus Plugin

Created "Space Chili", a free and open-source delay and chorus plugin available in VST3, AU, and LV2 formats.

**Technologies Used:** C++, JUCE Framework, DSP concepts, Illustrator, Blender

**GitHub:** <https://github.com/glafiro/space-chili>

### Trio - Multiband Compressor

Developed "Trio", a free and open-source 3-band compressor plugin for Windows, macOS, and Linux.

**Technologies Used:** C++, JUCE Framework, DSP concepts, Illustrator

**GitHub:** <https://github.com/glafiro/trio>

### Marching squares

A simple implementation of the Marching Squares algorithm. Mostly made to teach myself the raylib library and OpenGL.

**Technologies Used:** C++, raylib, OpenGL

**GitHub:** <https://github.com/glafiro/marching-squares>

### Rubik - Rubik's cube visualizer

A Rubik's cube visualizer and simulator.

**Technologies Used:** C++, raylib, OpenGL

**GitHub:** <https://github.com/glafiro/Rubik>

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## SELECT PROFESSIONAL EXPERIENCE

### Audio Producer, Mixing and Mastering Engineer, Sound Designer

#### *Freelance*

MARCH 2006 - TODAY

- **Provided music production, mixing, and recording services for over 200 artists** across Italy under the moniker “David Hoover”.
- **Contributed to more than 100 albums**, including major records; a partial discography is available [here](#).
- Developed a strong reputation in the Italian music industry for delivering high-quality productions and innovative sound design.
- Utilized advanced audio production tools including **Ableton Live, Steinberg Cubase and Reaper to create professional-grade audio**.
- Managed all aspects of production, from initial recording sessions to final mastering, demonstrating comprehensive expertise in the audio production process.

### Web Developer & Technical Support

#### *Agriturismo Casentino, Bibbiena (AR)*

MAY 2018 - MARCH 2023

- **Developed and maintained the company website** (agriturismocasentino.it, which has now changed ownership) using PHP, JavaScript, and WordPress.
- **Created a custom hotel booking system** to improve reservation efficiency, using Javascript, Node.js and React.
- **Managed IT system**, including network configurations and software installations, to provide technical support.
- **Designed graphics** and labels for events and consumer products using Affinity Designer, Adobe Illustrator and Canva.
- **Communicated with international clientele**, providing multilingual customer service and support.

### Logistics Manager & Development Assistant

#### *CEAM Control Equipment Srl, Empoli (FI)*

MAY 2021 - DECEMBER 2022

- Assisted in **firmware development** for temperature and humidity sensors, gaining experience in embedded systems programming.
- Worked with engineers to facilitate **hardware-software integration**.
- Planned and coordinated daily logistics and warehouse activities, **ensuring timely flow of incoming and outgoing goods under tight deadlines**.
- **Communicated effectively with clients and suppliers**, both national and international, via email and phone in Italian and English.

### English Tutor

MAY 2015 - APRIL 2018

- **Helped over 50 students** in achieving various levels of proficiency (A2 to C1) in English.
- **Prepared** students for national and international exams and certifications like BEC.
- **Enhanced** organizational and communication skills through personalized lesson planning and in-person teaching.

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## EDUCATION

### Self-taught programmer

- **C++ Mastery:** studied "*C++ Primer*" by Stanley B. Lippman, Josée Lajoie, and Barbara E. Moo and "*Effective Modern C++*" by Scott Meyers.
- **Audio Signal Processing:** learned from "Understanding Digital Signal Processing" by Richard G. Lyon, "Digital Signal Processing" on Coursera and "Designing Audio Effect Plugins in C++" by Will C. Pirkle.
- **Computer Architecture:** studied "Computer Systems: A Programmer's Perspective" by Randal E. Bryant & David R. O'Hallaron
- **Computer Graphics:** [learnopengl.com](http://learnopengl.com) by Joey de Vries.

### Formal education

- **Liceo Scientifico G. Giorgi**, Milano - 2012

## LANGUAGES

**Italian:** Native

**English:** Proficient