
Davide Glafiro

Software developer

github.com/glafiro

glafo.dev

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DOB: 07/01/1991

SKILLS

- **Programming Languages:** C, C++, JavaScript, Python, PHP, GLSL, Bash
- **Web Technologies:** HTML, CSS, Node.js, React, Web Audio API, WebGL
- **Frameworks and Libraries:** JUCE, Arduino, OpenGL, OpenCV, Boost, STL
- **Version Control and Build Tools:** Git, CMake, Make
- **Game Engines:** raylib, Unity, Unreal Engine
- **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, scrum, agile

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/attila>

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>

Envelope Match - Envelope Follower

Envelope Match is an envelope follower audio plug-in that I made because I could not really find anything that satisfied my needs.

Technologies Used: C++, JUCE Framework, DSP concepts, Figma

GitHub: <https://github.com/glafiro/envelope-match>

Rubik - Rubik's cube visualizer

A Rubik's cube visualizer and simulator.

Technologies Used: C++, raylib, OpenGL

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

SELECT PROFESSIONAL EXPERIENCE

C++ Software Developer

Independent developer

SEPTEMBRE 2021 - TODAY (3+ YEARS)

- Designed and developed **complete audio applications in C++ from concept through to deployment**. Emphasized **high performance** and **memory efficiency** in a real-time context, addressing the critical requirements of audio software development.
- Implemented digital signal processing (DSP) algorithms, including **researching and interpreting DSP academic papers** to ensure cutting-edge functionality.
- Built user interfaces (UIs) and enhanced user experiences (UX) in Figma, Illustrator, Affinity Designer, and Blender, followed by implementation in JUCE. Developed UI components ranging **from basic menus and sliders to complex real-time spectrum analyzers**.
- Managed cross-platform compilation and deployment for Windows, Mac, and Linux, including handling **notarization** and **code signing** processes.
- Architected robust software structures and ensured **thread-safe** operations throughout applications.
- Utilized **Git** for version control and state management, maintaining comprehensive and organized codebases.
- Some of the projects can be checked at github.com/glafiro

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.

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- **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**.

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 by Joey de Vries.

Formal education

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

LANGUAGES

Italian: Native

English: Proficient