



## Filipe Coelho

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## Online Profile

github.com/falkTX  
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# Filipe Coelho

## Software Developer

### About Me

Self-taught software developer, with personal interest in C++ and Python. Easily motivated by a good challenge. Open-Source enthusiast.

## Software Development Skills

### Programming Languages

- C
- C++
- Javascript
- Python

### Programming Frameworks

- Juce
- Qt
- HTML5/CSS3/ES6

### Programming Systems

- Bash scripting
- Debian packaging
- Linux (OS and APIs)
- git (versioning system)

### Created Open-Source Projects

- **KXStudio** - *kx.studio* - 2009  
Linux distribution and repositories, focused on audio production.
- **Cadence** - *kx.studio/cadence* - 2009  
A collection of tools to manage Linux audio.  
Includes JACK settings, patchbay, recorder, meter and more.
- **Carla** - *kx.studio/carla* - 2011  
Fully-featured cross-platform audio plugin host.  
Loads several formats plugins and sample banks, and also works as an audio plugin itself.
- **DPF** - *github.com/DISTRHO/DPF* - 2011  
C++ framework to create real-time cross-platform audio plugins.  
Provides UI support using Cairo or OpenGL.
- **DPF-Plugins** - *github.com/DISTRHO/DPF-Plugins* - 2012  
A collection of real-time audio plugins, based on DPF.
- **DISTRHO-Ports** - *distrho.sf.net/ports* - 2011  
Linux ports of existing open-source audio plugins, using Juce.  
Contains a forked version of the Juce library for LV2 plugin support.

## Work Experience

### May 2019 - current, *Software Developer, MOD Devices GmbH*

- Linux embed developer and tech lead

Technologies used: Buildroot, C, C++, HTML5, Javascript, Python

### October 2018 - May 2019, *Software Developer, BEWATEC*

- Full-stack developer

Technologies used: AWS, Node Express, Go, ReactJS

### September 2017 - October 2018, *Software Developer, Snuk*

- Full-stack developer

Technologies used: Ansible, Django, Docker, Go, GCP, Grafana, ReactJS

### September 2015 - current, *Software Developer, MOD Duo GbR*

- Creation of a highly-optimized, real-time Linux embedded system
- Programming of a complex HTML interface and webserver
- Programming of real-time audio applications and plugins

Technologies used: Buildroot, C, C++, HTML5, Javascript, Python



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## Interests

### Professional

- Creation of desktop applications
- Software development focused on high-performance, with real-time requirements in mind
- Software with hardware integration

### Personal

- Audio production (FL Studio, Renoise and self-made applications)
- Linux and Open-Source enthusiast

## Publications and Presentations

**2019, *Past, Present and Future of the JACK Audio Connection Kit*, Sonoj**

<https://media.ccc.de/v/sonoj2019-1902-jack-past-present-future>

**2018, *An explanation of various plugin formats and why they exist*, Sonoj**

<https://media.ccc.de/v/sonoj2018-1803-plugin-formats>

**2018, *Carla feature overview and workflows*, Linux Audio Conference**

[https://media.ccc.de/v/lac2018-24-carla\\_plugin\\_host\\_feature\\_overview\\_and\\_workflows](https://media.ccc.de/v/lac2018-24-carla_plugin_host_feature_overview_and_workflows)

**2017, *Carla Demonstration and Workflows*, Sonoj**

<https://media.ccc.de/v/sonoj2017-1704-carla-plugin-host>

**2017, *Team presentation about the MOD*, Linux Audio Conference**

<https://youtu.be/kmil9luagVk>

**2016, *LV2 Plugin Publishing for MOD*, Linux Audio Conference**

<https://media.ccc.de/v/minilac16-publishingyourlv2>

**2016, *Making Plugins with DPF*, Linux Audio Conference**

<https://media.ccc.de/v/minilac16-ltsmakesomeplugins>

**2015, *Carla Presentation*, Linux Audio Conference**

<https://lac.linuxaudio.org/2015/video.php?id=47&h=576>

**2015, *Testing audio plugins with Carla*, Linux Audio Conference**

<https://lac.linuxaudio.org/2015/video.php?id=70&h=576>

**2015, *Personal Interview*, Libre Music Production**

<https://libremusicproduction.com/articles/friday-interview-2-falktx>

**2015, *Publication about Carla*, Linux Magazine**

<https://www.linux-magazine.com/Issues/2015/175/Carla>

**2014, *DPF Presentation*, Linux Audio Conference**

<https://lac.linuxaudio.org/2014/video.php?id=91&h=720>