

# > About me

Valerio Viperino

I am a software developer with a passion for philosophy, Open Source and the fine line between art and technology. I started my career originally as a 3d artist 12 years ago, when Quartz Composer was still cool.

I ♥ hacking things to understand how they work. I spent the last 10 years writing custom software to support teams delivering Computer Graphics work for films, TV, advertising and special projects like rides for amusement parks. Lately I've been focusing more on non user-facing problems related to the architecture of CG pipelines, helping to build, package and distribute software efficiently; always with an eye on reducing the runtime requirements on production systems to simplify their maintenance.



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I have been programming in Python for the last 10 years. 4 years ago I started learning Rust, which has become my favourite language. I've brought my Rust knowledge to my current team and we've been happily using it in production for the last 3 years. In the past I did both frontend (Vanilla JS/HTML5) and backend (NodeJS, Flask and FastAPI) work. In my spare time I developed art installations and data visualisations using OpenFrameworks (C++ toolkit) and Houdini (a procedural 3d software). I have no problem picking up new languages and tech stacks if they're a fit for the problem.

## Quick recap:

- I am proficient in **Python**
- I have intermediate knowledge of **Rust**
- I was there during the Python 2 to 3 migration!
- I like working in **UNIX**-like environments
- I'm a command line geek
- I have good working knowledge of **Bash**
- I'm always looking for opportunities to make the world a better place
- I grew up using Open Source and I'm passionate about giving back to the community!

## Education

<i>MA – Computational Arts</i>	Goldsmiths University of London	2018
<i>Short Course on Data Science using R</i>	Manpower	2017
<i>Houdini Masterclass for Visual Effects</i>	VIFX – School of VFX	2017
<i>Short Course on Open &amp; Big Data visualisation</i>	Rome Academy of Fine Arts	2016
<i>3D Generalist Course</i>	Rainbow Academy	2012
<i>High School – Humanities [Greek, Latin, Philosophy]</i>	Liceo Classico Mancinelli	2011

## Pipeline Developer

(2022→current)  Apple, California

I am the Lead Developer of the Core Pipeline Team at CG Studio, inside Apple's Marketing and Communication org (Marcom). We write foundational software to ensure the wider pipeline team can support all the ongoing initiatives in CGS.

- Helped maintain the CRUD layer on our main **Flask** service (DB migrations, etc)
- Implemented a cache microservice in **async tokio**, which helped alleviate pressure on our main service, bringing us back to serve millions of requests per day
- **Dockerised** recipes to simplify building C++ software from source, preventing "*it builds on my machine*" problems and allowing us to use OSS critical for our needs
- Designed and implemented a new system to simplify software releases, allowing everybody to immediately deploy changes to production once the CI passes
- Wrote libraries to interface with **S3**, authenticating via **OAuth** (OIDC)
- Coordinated with the IT team to simplify deploying changes to our render farm configuration
- Wrote a **Rust** CLI responsible of fully setting up a dev environment and installing all the internal packages required for pipeline environments, which massively simplified the onboarding process for devs and users of the pipeline

## Pipeline TD

(2019→2022)  Framestore, UK

- Worked for the Integrated Advertising division of the company, which also supported special projects (e.g. immersive rides)
- Authored tools in Python to simplify the colour workflow (baking LUTs using OpenColorIO) and the in-context reviewing process (generating timelines programmatically using OpenTimelineIO in Hiero)
- Maintained and revamped 2d comp and editorial tools in Nuke and Hiero
- Set up CI pipelines in Gitlab to support migrating from Python 2.7 to 3.6

## Pipeline Developer

(2018→2019)  Frame by Frame, Italy

- Bootstrapped the development of a new VFX pipeline to support a new episodic show (My Brilliant Friend, Season 2)
- Developed in-DCC (Digital Content Creation app) GUI tools for artists to help save Nuke scripts and to simplify shader assignment via Arnold operators
- Helped maintain the render farm submission tools (Deadline)
- Helped shape the colour pipeline of the show, which saw the adoption of ACES

## Software Developer

(2015→2018) Freelance, Italy

- Physical Computing for art installation work (Arduino, Raspberry Pis)
- Tooling for CG Pipelines (Python, ShotGrid API, Deadline API)
- Full stack work for startups (NodeJS [ExpressJS])
- 360 Virtual Tours using Google Cardboard (Java for Android, KRPano)

## Through the streets of Rome

2017 Data Visualization

After attending a short course on "Open and Big Data Visualization: the aesthetics of the flux" I created a data viz of the car crashes in the city of Rome. It won an award in the Illustration category at the 2017 Digital Design Days in Milan (Italy). I used Houdini and a custom GeoJSON library I wrote in order to create a series of illustrations together with a time-lapse video showing the crashes happening in the March/August 2017 period.

<https://www.behance.net/gallery/58264131/Through-the-Streets-of-Rome>



## Generative Twitter Bot

2016 New media art

I wrote a bot for Twitter using [NodeJS](#) and [OpenFrameworks](#) (a C++ creative coding framework). Deployed on Heroku, it used to retweet posts tagged under specific hashtags. It also created, uploaded and posted images generated via OpenFrameworks.

