Arnaud Fauconnet

Website: www.karma-riuk.com

Email: arnaud.fauconnet.pro@gmail.com

GitHub: github.com/karma-riuk Gitea: git.karma-riuk.com/karma Mobile +41 (0) 78 894 30 44



Passionate about computer science and love to have lengthy conversations about it. Autonomous but also capable of communicating and handling people. Overall flexible, adaptable and always curious by new experiences.

"Do one thing, and do it well" (Ken Thompson on the Unix Philosophy).

EXPERIENCES

USI - UROP (Undergraduate Research Opportunities Program)

Among the top 5 students who applied to assist on a research project

- Worked with Jorge Condor under the tutelage of Prof. Piotr Didyk

- The project aimed to use event cameras and NeRFs for HDR reconstruction (computer graphics)

USI - Teacher Assistant

Assisted teachers in grading assignments and exams, helped students with difficult concepts

- Programming Fundamentals 2 with Prof. Matthias Hauswirth

- Systems Programming with Prof. Antonio Carzaniga

TCPOS SA - Zucchetti Switzerland

Stage as front-end developer as part of the USI course

Lugano, CH

Spring 2023

Autumn 2022

EDUCATION

| Master in Software and Data Engineering Università della Svizzera Italiana, GPA: 9.55/10 | Lugano, CH 2023–Present |
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| Bachelor in Computer Science Università della Svizzera Italiana, GPA: 9.21/10 | Lugano, CH 2020–2023 |

SKILLS

- Programming: Python, Java, C, C++, Bash, Lua
- Web: HTML/CSS, JavaScript, TypeScript, NodeJS, Express, MongoDB, SQL, NoSQL, Spring Boot, PHP
- Tools/Techs: TEX, Git, Unix shell, Maven, NeoVim
- Development: Test-driven development, Refactoring, Agile!, SCRUM, CI/CD

LANGUAGES & HOBBIES

- French: First mother tongue
- English: Second mother tongue
- Italian: Native speaker, CEFR level: C2
- German: Conversational, CEFR level: A2-B1
- Hobbies: Theatre, open source contributions, shooting sports, sewing, chess, basketball

PROJECTS

Ray Tracer in one weekend (github.com/karma-riuk/ray-tracer)

C++, Side Project, 2024

maze-solver-go (github.com/karma-riuk/maze-solver-go)

Golang, Side Project, 2023

- A maze solver which implements various path-finding algorithms
- Learned about well structuring and design software, with unit-testing and dependency injection

From Flying Balls to Colliding Polygons

C++, Bachelor Thesis USI, 2023

- Expansion of an existing physics engine
- Learned about physics concepts and how to represent them efficiently in code

Codernoon Web, BA4 USI, 2022

- Learned to be a team leader and to handle a group of 13 people with continuous integration
- Web game (inpsired by Swift Playgrounds), created with Spring Boot and HTML/CSS + Javascript

Ubuntu Server Maintainance of an Ubuntu server I built

Unix since 2019