

Quentin Juppet

Software Developer & Data Scientist

Computer scientist with 2+ years of broad experience in data science and software development. Specialised in biomedical image analysis and deep learning. Full stack developer capable of overcoming big data challenges, generating efficient algorithms and creating intuitive user interfaces.

🔍 +41 76 596 10 05 📀 Prilly, Suisse 🛛 quentin.jv@gmail.com 🚺 /quentin-juppet 🕀 quentin-juppet.com

SKILLS



Programming languages











CORE EXPERIENCE

Software Developer and Data Scientist

Lunaphore Technologies

09/2021 – Present

Full-time

- Developed a biomedical image analysis software based on Python and PyQt that integrates state-of-the-art machine learning tools.
- Designed full software architecture including database, plugin and multiprocessing systems.
- Handled big data visualization for images and annotations using OpenGL.
- Created CI/CD pipeline with Azure DevOps.
- Advised a growing team as the software expert.

Research Assistant

Weigert Group, EPFL

11/2021 - 06/2022

Part-time

- Developed an extension for image analysis software QuPath named Ductales to characterize ducts in breast tissue images (H&E stained), it is available on <u>GitHub</u> and implemented in Java.
- Integrated cell analysis pipeline based on deep learning methods.
- Created graph-based algorithms to extract duct features.
- Collaborated with Brisken Lab specialized in breast cancer research.

Master Project

Lunaphore Technologies, EPFL

02/2021 – 08/2021

Full-time

 Compared various existing and newly created machine learning algorithms, including deep learning ones, to prepare the company's first steps towards cell analysis: nuclei segmentation, tissue detection and cell classification.

EDUCATION

Swiss Federal Institute of Technology, Lausanne (EPFL)

Master in Computer Science	2021
 Specialisation in image analysis and machine learning. 	
Bachelor in Computer Science	2019
 Specialisation in computer vision. 	
Lycée René Perrin, Ugine – France	
Scientific Baccalaureate	2016

Engineering Science section (mechanic and electronic).

ADDITIONAL EXPERIENCE

Student Assistant

EPFL

03/2019 – 01/2021

- Created a Java-based game engine for "Introduction à la programmation" lecture and implemented 2 mini-projects for the students using it.
- Supervised students and student assistants as the project expert.

Junior Software Developer

Lunaphore Technologies

06/2017 – 01/2021

- Developed multiple software to control medical devices in C# and WPF.
- Created biomedical image visualization software.
- Collaborated with applied biology and hardware teams.

Freelance

10.5 Informatique 01/2014 – 06/2020

- Creation of websites, training and computer material repair.

AWARDS

Best trainee paper

2021

Part-time

Part-time

Part-time

- Journal of Mammary Gland Biology and Neoplasia.

10th at the Prologin contest

2019

- French national algorithmic contest.

3rd at the Prologin contest

2018

- French national algorithmic contest.

1st at the Martian Challenge contest 2017

- Algorithmic contest for EPFL first-year students.

Innovation Price at "Olympiades de sciences de l'ingénieur"

2016

- Regional engineering contest (robotic).

7th at the Algoréa contest 2015

- French national algorithmic contest.

PUBLICATIONS

Mapping the cellular architecture of the tumor microenvironment by integrating hyperplex immunofluorescence and automated image analysis

Cancer Research, Poster

P.M. Almeida, F. Rivest, Q. Juppet, J. Kowal, et al.

- Performed unsupervised clustering on cell intensities from immunofluorescence image.

Deep Learning Enables Individual Xenograft Cell Classification in Histological Images by

Analysis of Contextual Features Best trainee paper Front page

Journal of Mammary Gland Biology and Neoplasia, Article Q. Juppet, F. De Martino, et al.

- Created an ImageJ plugin in Java to perform cell classification based on contextual features.

EXTRACURRICULAR ACTIVITIES

Badminton

 Organizer of weekly badminton meetings for LGBT+ association.

Algorithmic contests

- Participated in various algorithmic contests.

PERSONAL INFORMATION

Nationality: Swiss and French Age: 24 years old Civil status: single Driving licence: yes First aid: yes 05/2021

06/2022