Guilhem Chéron

Machine Learning Engineer / MLOps
Lead Consultant

France
✉ *guilhem.cheron35@gmail.com*
🖰 *www.normalesup.org/~gcheron*

As a Machine Learning Engineer / MLOps, I am very interested in
deploying ML models in production and all the related practices
(Cloud architecture, MLOps, machine learning and full stack).

Education

2014-2018 **École Normale Supérieure (ENS)**, *Paris, France*, PhD.
PhD in computer vision at Inria – Willow and Thoth (former Lear) project-teams. Supervised by Cordelia Schmid and Ivan Laptev. Structured modeling and recognition of human actions in video.

2013-2014 **École Normale Supérieure (ENS) de Cachan**, *Cachan, France*, MSc by Research.
Master of Science by Research in mathematics, computer vision and machine learning (MVA).

2010-2013 **École Supérieure d'Ingénieurs de Rennes (ESIR)**, *Rennes, France*, Diplôme d'ingénieur.
Engineer's degree in computer science, image processing and computer graphics.

Work experience

Feb. 2023 - Now **Devoteam Revolve - Machine Learning Engineer / MLOps - Lead Consultant**, *Paris, France*.
Generative AI / Machine Learning Engineer - Lead Consultant @Bouygues Telecom :
- Studying generative AI and large language models (LLM)
- Deploying LLM related applications in the AWS cloud
- LLM / Embedding: OpenAI, Azure OpenAI, Amazon Bedrock, Google Vertex AI
- LangChain, ReAct Agents, Retrieval Augmented Generation (RAG)

Cloud Engineer @Proovstation :
- Building a Landing Zone in the AWS cloud
- Implementation of an automation and continuous integration approach
- Training and knowledge sharing

Feb. 2019 - Feb. 2023 **Jules sas – Authentifier.com**, *Rennes, France*, Counterfeit detection..
Lead Machine Learning Engineer / MLOps :
- Building ML workflows/ MLOps systems consisting of multiple components including : data pipeline, model training, model testing, model deployment, experiment tracking, data versioning, model registry, batch processing, data labeling (with active learning), model monitoring, CI/CD
- Building an image search engine : store, index, and manage massive (image) embedding vectors, query API, feature extraction and indexing scheduler
- Building webapp / dashboards
This was hosted both in a cloud (AWS) or in an on-premise environment.

Lead Data ScientistLead Data Scientist :
- Building computer vision models targeting counterfeit detection
- Leading the research team of 4 data scientists

Oct.-January 2018/2019 **Microsoft Research – HoloLens project**, *Cambridge, UK*, Visiting researcher.
Supervised by Andrew Fitzgibbon.

April-July 2016 **Microsoft Research – Machine Intelligence and Perception group (MIP)**, *Cambridge, UK*, Research Internship.
Supervised by Andrew Fitzgibbon. Study of machine learning methods for hand tracking.

April-Sept. 2014	**Inria Paris – Willow team**, *Paris, France*, Research Internship.
	Recognition of human interactions.
March-Sept. 2013	**Safran - Morpho**, *Paris, France*, End-of-degree Internship.
	Face recognition and 3D shape estimation.
June-Sept. 2012	**French Atomic Energy Commission (CEA)**, *Paris, France*, Engineering Internship.
	Crowd simulation.

Certifications

AWS Certified Solutions Architect - Associate

Stack (general)

Favorite languages	Python, JavaScript
Ops/IaC	AWS, Docker, Terraform, Gitlab, Ansible
Backend	FastAPI, Flask, Node.js/Express
Frontend	Vue.js
... deployed with	AWS: ECS, EC2, API Gateway, ALB, CloudFront+S3, ...
Other web	Cognito, Nginx, Apache
Databases	SQL, DynamoDB, MongoDB
OS	Linux/MacOS
Interests	(as a geek) I am very interested in full stack development (Cloud architecture, debugging, WebApp, IT/servers, ...)

Stack (ML)

ML frameworks	PyTorch, LangChain, PyTorch Lightning, SageMaker, HuggingFace
NLP	OpenAI, Azure OpenAI, Amazon Bedrock, Google AI
ML model deploy	SageMaker, TorchServe, JIT/TorchScript/ONNX
Managed ML	Amazon Bedrock, AWS Rekognition
Exp. tracking	MLFlow

Research interests

Computer vision, NLP, machine learning, action recognition and localization, deep learning.

Reviewing

Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2018.

Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2017.

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.

International Journal of Computer Vision (IJCV), 2017.

International Journal of Computer Vision (IJCV), 2016.

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016.

IEEE European Conference on Computer Vision, (ECCV) 2016.

Miscellaneous

Languages	French (native) and English (fluent).
Hobbies	Sport: boxing, bodybuilding, skiing
	Music: Computer music/beatmaking, singing

References

Cordelia Schmid

Thoth project-team

Google research - Inria, Grenoble, France

http://thoth.inrialpes.fr/~schmid/

Ivan Laptev

Willow project-team

École Normale Supérieure – Inria, Paris, France

https://www.di.ens.fr/~laptev/

Andrew Fitzgibbon

Machine Intelligence and Perception group

Microsoft Research, Cambridge, UK

https://www.microsoft.com/en-us/research/people/awf/

Éric Marchand

Lagadic project-team

Irisa – Inria, Rennes, France

http://www.irisa.fr/lagadic/team/Eric.Marchand-eng