CALLARD Baptiste

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Looking for a 4 to 6 month internship or PhD starting in October 2024.

EDUCATION

ENS Paris-Saclay · Master MVA (Mathématiques Vision Apprentissage)   Paris, France
MSc. in Applied Mathematics & Artificial Intelligence   *Sep 2023 – sep 2024*

- **World's top-ranked mathematics university (ARWU)** partnership with : ENS Ulm · Polytechnique · Centralesupélec · Dauphine PSL · Mines Paris
- **Relevant coursework:** Advanced learning for text and graph data · Geometric data analysis · Time series learning · Object recognition and computer vision · Introduction to Probabilistic Graphical Models and Deep Generative Models · Convex optimization and application in machine learning · Generative models for images · Graphs in machine learning · Deep learning for medical imaging/in practice · Reinforcement Learning

INSA Rennes · Engineering school   Rennes, France
MSc. in Applied Mathematics; ***GPA: 4.0/4.0 (valecditorian)***   *Sep 2018 – sep 2023*

- **Relevant coursework:** Probability · Statistics · Optimization · Graph Theory · Operational research · Deep Learning · Computer Vision · Cybersecurity

University of Klagenfurt   Klagenfurt, Austria
MSc. in Artificial Intelligence & Cybersecurity; ***GPA: 4.0/4.0***   *Mar 2022 – jul 2022*

WORK EXPERIENCE

Valeo AI ([team website](#)): Research Scientist   Paris, France
Skills : Python · Pytorch · Linux · Git   *April 2024 – October 2024, Intership*

- Working on the tokenisation and quantization of a multi-view camera to perform GPT inference in latent space for creating real world models for autonomous driving.

Airbus Defence & Space: Research in Computer Vision   Toulouse, France
Skills : Python · Pytorch · GCP · Docker · Linux · Git · Plotly · Cuda   *Feb 2023 – July 2023, Intership*

- Conducted research, designed, fine-tuned, and assessed our novel segmentation and polygonization method for building footprints detector from very high quality satellite imagery.

Qohash: Research Data Scientist in Cybersecurity   Montreal, Canada (Remote)
Skills : Python · Tensorflow · Sklearn · Neo4j   *Jul 2022 – Sep 2022, Intership*

- Research work for designing a new unsupervised insider threat detection. We used an innovative temporal graph structure with node embedding deep learning methods, enhancing security measures.

Wizdeo: Research and Development Data Scientist   Rennes, France
Skills : Python · SQL · Mongo · Plotly · StatsModels   *Jul 2021 – Sep 2021, Internship*

M2S Laboratory (ENS Rennes)   Rennes, France
Researcher Assistant   *Part-time (3 hours/week)*

SKILLS

Programming: Python · R · Julia · C · Latex · Neo4j · Linux · SQL · MongoDB · Cuda · Git · Docker · GCP
Libraries: Pytorch · Keras · Sklearn · Statsmodels · OpenCv · Pandas · Numpy · Tensorboard · Matplotlib · Plotly
Languages: French (Native), English (Professional : TOEIC 885)
Review, write papers and posters from courses : *[drive](#)*

PROJECTS

Challenge : Molecule retrieval with natural language *[rank 1/122](#)* (Polytechnique)/ Image classification *[rank 4/59](#)* & *[Github](#)* (ENS-Ulm) / Video retrieval *[rank 1/7 / GitHub](#)* / Semi-Supervised, Few-shot, novelty instance segmentation - Advanced level (College de France) *[2/15](#)* / Mutli-Modal Multiple Instance Learning *[ongoing](#)*

Learning : Soft-DTW *[Github](#)* / Generative Adversarial Model *[Github](#)* / Wasserstein Graph Alignment *[GitHub](#)* / Video Retrieval using image and text query *[Github](#)* / Optimal research : Shortest path with constraints Python *[GitHub](#)*

Personal : Clone a video game *[GitHub](#)* / Klein Attack *[GitHub](#)* / Length extension attack *[GitHub](#)*

RECOMMENDATIONS

Academics: L. OUDRE (Director MVA) / J. LEDOUX (Director INSA) / P. Roph (Prof. Computer Vision)