JULIEN DENIZE

PHD CANDIDATE

CONTACT

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5 Route de Saclay
91120 Palaiseau, France

SKILLS

Programming

Machine Learning
PyTorch, Scikit-Learn, Numpy,
TensorFlow, Pandas

MLOps
Git, Slurm, Kubernetes, Docker, AWS

Languages
Python, Bash, JavaScript, SQL, Java, C

Soft skills

Problem solver
Communication
Teamwork
Autonomy

EDUCATION

PhD in Computer Science

CEA List, INSA Rouen
2020-Present

Machine Learning and Computer Vision

Master of Engineering in Computer Science

Télécom SudParis
2017-2020

Major in Artifical Intelligence
Minor in Software Engineering

LANGUAGES

Native french
Full professional English
Elementary Spanish and German

PROFILE

Tech enthusiast, I am a PhD candidate about to defend my thesis in Machine Learning after completing a Master of Engineering in Software Engineering and AI. As a problem solver, I enjoyed proposing and developing new state-of-the-art deep learning solutions during my thesis. As a believer in open science, I have shared my contributions through open source libraries. I aim to apply and enhance my skills in developing AI solutions as a Machine Learning Engineer.

WORK EXPERIENCE

Machine Learning PhD Candidate
CEA List

December 2020-Present
Palaiseau, France

Self-supervised representation learning for image and video analysis
- Published new state-of-the-art **deep learning** methods in **international conferences and journals.**
- Developed **open source libraries** in PyTorch available on my GitHub:
  - Eztorch: efficient **pretraining and fine-tuning of CNNs and Transformers.**
  - Torchaug: efficient batched and on-GPU data augmentations.
- **Optimized parallelized code to run distributed deep learning experiments** on clusters managed by Slurm and Kubernetes.
- Participated in the **international action spotting challenge SoccerNet2023** and finished 5th out of 12 teams.

Teaching
- Designed and taught a **course on the basics of deep learning** (computer vision, NLP, generative models) for the BDMA Master at CentraleSupélec.
- Trained my service of around 80 people on how to effectively use the **FactoryIA HPC cluster** to **accelerate deep learning experiments**.

Management
- Supervised two six-month internships of MSc students.
- Member of the living committee to maintain a healthy working environment.

— **PyTorch, TensorFlow, Slurm, Kubernetes, CI/CD, GitHub Actions**

AI Research Intern
CEA List

March-September 2020
Palaiseau, France

People re-identification and cross-domain adaptation via generative models
- Implemented state-of-the-art **deep learning** methods to perform cross-domain person re-identification.
- Proposed a new state-of-the-art competitive approach using **Generative Adversarial Networks** and **pseudo-labeling**.

— **PyTorch, Slurm**

Data Scientist Intern
Continental

June - September 2019
Regensburg, Germany

- **Analyzed and visualized manufacturing data** in collaboration with experts from Industry 4.0 factories using AWS (EC2, Kibana, Elastic Search).
- Implemented machine learning algorithms to **detect manufacturing anomalies and predict maintenance**.

— **Keras, Numpy, Scikit-Learn, Pandas, AWS**

Technical Expert
Sprint Junior Entreprise

September 2017 - March 2019
Evry, France

Technical Specialist
- **Managed technical projects** from negotiation and hiring to project delivery.
- **Maintained the IT infrastructure** including the website and CRM platform.

Web developer
- Developed and **deployed an accommodation web platform** for a public institute.

— **HTML, CSS, JavaScript, PHP, SQL, Symfony, Docker**