

Fabien DELATTRE

Ph.D. student in Computer Vision

fdelattre@cs.umass.edu

(413)461-6985

linkedin.com/in/fabien-delattre

Research interest

Self-supervised learning, Representation learning, Visual tracking

Education

University of Massachusetts, Amherst

May 2020 - (May 2025) | Amherst, MA

MS/Ph.D. in Computer Science

Advised by: Prof. Erik Learned-Miller

Aug 2019 - May 2020 | Amherst, MA

MS in Computer Science

GPA 4.0/4.0

Relevant coursework: Computer Vision, Reinforcement Learning, Neural Networks, Artificial Intelligence, Neurodynamics, distributed and operating systems

ISEN Engineering School

Sep 2014 - May 2019 | Lille, France

Engineering degree in Computer Science

Relevant coursework: Data Structures, Advanced Algorithms, Artificial Intelligence, Big Data, Linear Algebra

Juniata College

Aug 2018 - May 2019 | Huntingdon, PA

Exchange student in Computer Science

GPA 3.86/4.0

Relevant coursework: Machine Learning, Numerical Analysis, Statistical Consulting

Publications & Projects

Tang, Zhipeng, **Fabien Delattre**, Pia Bideau, Mark D. Corner and Erik G. Learned-Miller. "C-14: assured timestamps for drone videos." *Proceedings of the 26th Annual International Conference on Mobile Computing and Networking (2020)*

Keshav, Vishal and **Fabien Delattre**. "Self-supervised visual feature learning with curriculum." *ArXiv abs/2001.05634 (2020)*

Delattre, Fabien and Vishnu Balakrishnan. "Minimum commitment Loss for Semantic Segmentation with partial labels" fabienelattre.com/mincommitment (2020)

Technical Skills

Python (PyTorch, Keras, Scikit-learn, Django), SQL, C++, C, Javascript (jQuery, Vue.js), PHP (Laravel), HTML/CSS, Git, Latex

Research Experience

Research Assistant, UMass Amherst

May 2021 - present | Amherst, MA

- Self-supervised representation learning from scene centric videos
- Worked on object detection and distribution modeling for the DARPA Lifelong Learning Machines Program (L2M)
- Developed a system based on optical flow and camera motion estimation to correlate UAV video with preexisting flight plans

Machine Learning Research Intern, Samsung SSIC

May 2019 - Aug 2019 | Paris, France

- Developed a Generative Adversarial Network for Image Super-Resolution, background removal and reflection removal using PyTorch

Student Researcher, Juniata College

Jan 2019 - May 2019 | Huntingdon, PA

- Conducted research on Deep Learning architectures for DNA sequence classification, PyTorch under Prof. Regina Lamendella
- Conducted research on Self-Supervision for Reinforcement Learning algorithms under Prof. Gerald Kruse

Machine Learning Research Intern, Thales

May 2018 - Aug 2018 | Rungis, France

- Developed RNN to classify Aircraft trajectories using Keras for Air Traffic Management
- Worked on trajectory clustering algorithms

Teaching Experience

Teaching assistant, UMass Amherst

Sept 2020 - May 2021 | Amherst, MA

- CS230: Computer systems principles
- CS250: Introduction to Computation

Mentor, OpenClassrooms

Oct 2016 - Aug 2019 | France

- Mentored students on training courses: Multimedia Project Manager, Junior Web Developer and Data Analyst

Other Experiences

Co-founder & Full-stack developer, Liigem

Oct 2016 - Oct 2019 | Paris, France

Web development and chatbot company

- Created and developed chatbot that makes appointments
Incubated in Euratechnologies and Village by CA incubators
- Full-Stack developer on several projects for clients

Intern, Dassault Systèmes

Jul 2015 - Aug 2015 | Vélizy-Villacoublay, France

- Proximity Support & Integration: Inventory, development of Excel macros and data presentation

Web Developer, Self-employed

Jan 2015 - Oct 2016 | Saint-Cloud, France

- Developed and maintained websites for associations and small businesses using PHP, HTML, CSS