Song Duong

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https://scholar.google.com/citations?user=xieCwE4AAAAJ

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https://www.github.com/sngdng/

https://sngdng.github.io/

RESEARCH

July 2022 – Present

PhD Student (NLP)

Criteo AI Lab, Paris & CNRS-ISIR, Sorbonne University, Paris

Work under the supervision of *Patrick Gallinari* and *Alberto Lumbreras*.

Publications:

- S. Duong*, F. Le Bronnec*, A. Allauzen, V. Guigue, A. Lumbreras, L. Soulier, P. Gallinari. "SCOPE: A Self-supervised Framework for Improving Faithfulness in Conditional Text Generation". In *13th International Conference on Learning Representations (ICLR)*. 2025.
- F. Le Bronnec*, S. Duong*, M. Ravaut, A. Allauzen, N. F. Chen, V. Guigue, A. Lumbreras, L. Soulier, P. Gallinari. "LOCOST: State-Space Models for Long Document Abstractive Summarization." In *Proceedings of the 18th Conference of the European Chapter of the Association for Computational Linguistics (EACL)*. 2024. (**Best Paper Award**)
- S. Duong, A. Lumbreras, M. Gartrell, P. Gallinari. "Learning from Multiple Sources for Data-to-text and Text-to-data". In *26th International Conference on Artificial Intelligence and Statistics (AISTATS)*. 2023.

Jan 2022 – Jun 2022

Researcher (NLP)

Criteo AI Lab, Paris

- Study augmented latent variable models to handle multiple sources of structured data formats while learning in an unsupervised setting.
- Investigate the long-term potential of language models at Criteo.

May 2021 – Sep 2021

Research intern (RL)

Facebook AI Research, Paris

- Work under the supervision of *Ludovic Denoyer* to design a Continual Learning (CL) Benchmark to efficiently evaluate Continual RL agents.
- Design and implement a fully functional platform for evaluating CL models.
- Provide benchmarks for several CL baselines adapted for Deep RL.
- Contribute to the *SaLinA* library for sequential decision models:
  L. Denoyer, A. de la Fuente, S. Duong, J.-B. Gaya, P.-A. Kamienny, D. H. Thompson. "SaLinA: Sequential Learning of Agents". 2021.

WORK EXPERIENCE

Jan 2020 – July 2020

ML intern

Saildrone, Alameda

- Design and train a series of computer vision models for ocean classification.
- Optimize the model for inference on low-power GPUs (Jetson Nano) using pruning & knowledge distillation techniques.

July 2019 – Dec 2019	**IoT & ML intern**
	Microsoft, Issy-les-Moulineaux
	• Design lightweight neural networks for inferencing at the Edge through graph optimization and post-training quantization.
	• Deploy classification and object detection models on Vision AI Dev Kit.
	• Contribute to Azure Machine Learning and Azure IoT Edge documentations.

EDUCATION

2020 – 2021	**Master's degree in Machine Learning and Applied Mathematics**
	École normale supérieure Paris-Saclay, Paris
	• *Courses include*: Reinforcement Learning, Sequential Learning, Bayesian machine learning, Object Recognition and Computer Vision, Computational statistics, Convex optimization, Computational optimal transport.
2017 – 2021	**Master's degree in Applied Mathematics and Computer Science**
	École des Ponts Paristech, Paris
	• *Courses include*: Stochastic Process, Advanced Programming and Algorithms (C++), Software Design and Development (Python), Statistics and Data Analysis (R), Operational Research, Optimisation and Control, Machine Learning.
2015 – 2017	**Preparatory classes for the Grandes Écoles**
	Lycée Louis-le-Grand (High School), Paris
	• Two-year undergraduate intensive course in Mathematics and Physics to prepare for the Grandes Écoles (graduate engineering schools).
2012 – 2015	**Baccalauréat with major in Maths**
	Lycée Louis-le-Grand (High School), Paris
	• Obtained with first-class honours.

SKILLS

Languages	English – Fluent; French – Fluent; Vietnamese – Native (mother tongue); German – Intermediate (B1 level); Chinese – Beginner
Programming skills	Proficiency in: Python, Pytorch; Familiar with: Tensorflow, C++.

MISCELLANEOUS

Maths	PROMYS (Program Mathematics for Young Scientists):
	• 6-week summer math program at Boston University.
	• Editions 2013 & 2014.
	TFJM² (Tournois Français des Jeunes Mathématiciennes et Mathématiciens):
	• Editions 2013 (*honorable mentions*), 2014 (*2nd place*) & 2015 (*2nd place*).
	ITYM (International Tournament of Young Mathematicians):
	• Edition 2015 (*2nd place*).
Coding Competitions	Facebook Paris Hackathon
	• Edition 2019.
	Kiro Hackathon (Operations Research)
	• Editions 2018 & 2019.
Hobbies	Chess
	Ukulele