Eve Le Guillou

HPC · DISTRIBUTED COMPUTING TOPOLOGICAL DATA ANALYSIS

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EDUCATION

2017 - 2021	Multidisciplinary engineering degreeÉCOLE CENTRALE DE LILLE, FRA"Data Science and Artificial Intelligence" track.Completed with a GPA of 3.7.	ANCE
2019 - 2020	Master of ScienceCRANFIELD UNIVERSITYComputational and Software Techniques in Engineering in the "Software Engineering for TechnicalComputing" track.Completed with an overall mark of 87.5/100.	, UK
2015 - 2017	Classe Préparatoire aux Grandes Écoles (in Maths and Physics) LYCÉE CORNEILLE DE ROUEN, FRA Intensive undergraduate preparation course for admission to engineering Grandes Ecoles.	ANCE
	Work experience	
April 2022 - Present	Ph.D. in Computer Science CNRS, SORBONNE UNIVERSITÉ (LIP6), UNIVERSITÉ DE LILLE (CRIST Title: <i>Distributed Topological Analysis</i> Advisors: Julien Tierny and Pierre Fortin	rAL)
Oct. 2021 - March 2022	Research Engineer CNRS, SORBONNE UNIVERSITÉ (LIP6), UNIVERSITÉ DE LILLE (CRIST Title: Development of topological data analysis algorithms in a distributed memory context.	rAL)
March - Sept. 2021	Engineering Intern TRINOV, FRA Title: Development of a software for waste management to automatize the classification of scanned documents and extraction of data using deep learning models.	ANCE
July - August 2019	Research Intern DEFROST TEAM AT INRIA, FRA Title: Development of bindings and unit testing for the new Python3 interface of the multiphysics simulation orient plateform SOFA.	ANCE red
July - August 2018	Engineering Intern IT DEPARTMENT OF THE SOUTH PROVINCE, New CALEDO Title: Configuration of dynamic dashboards to evaluate the health of the information system using the Elastic Stack	ONIA k.
	Research	
	PUBLICATIONS	
2024		
	 TTK is Getting MPI-Ready, <u>Eve Le Guillou</u>, Michael Will, Pierre Guillou, Jonas Lukascz Pierre Fortin, Christoph Garth, Julien Tierny. <i>IEEE Transactions on Visualization and Computer Graphics, vol. 30, no. 8, pp. 5875-5892, Aug. 2</i> https://doi.org/10.1109/tvcg.2024.3390219 	.yk, 2024.
2021		
	• How to Modify LAMMPS: From the Prospective of a Particle Method Researcher, And Albano, <u>Eve le Guillou</u> , Antoine Danzé, Irene Moulitsas, Iwan H. Sahputra, Amin Rahm Carlos Alberto Duque-Daza, Xiaocheng Shang, Khai Ching Ng, Mostapha Ariane, and e <i>ChemEngineering, vol. 5, no. 2, article 30, 2021.</i>	lrea 1at, 1t al.
	https://doi.org/10.3390/chemengineering5020030	

	Talks
2025	
	+ Distributed Topological Data Analysis with TTK and MPI , $June~26^{th},~COMPAS$
	French national conference on parallelism, architecture and system
	 Distributed Discrete Morse Sandwich: Efficient Computation of Persistence Diagrams for Massive Scalar Data, June 2nd, Journées APR
	Annual meeting of the APR team from the LIP6 laboratory
2024	
	• TTK is Getting MPI-Ready , December 12^{th} , CFHP Team Presentation Monthly meeting of the CFHP team from the CRIStAL laboratory
	• TTK is Getting MPI-Ready , October 17 th , IEEE VIS conference (Rank: A)
	 TTK is Getting MPI-Ready, September 26th, ParaView User Day Europe Annual meeting of ParaView users organized by Kitware
	 TTK is Getting MPI-Ready , June 18th, Journées Visualization Annual meeting of the french visualization community
	• TTK is Getting MPI-Ready , May 30 th , Journées APR
	Annual meeting of the APR team from the LIP6 laboratory
2023	
	 Topological Data Analysis on 1, 536 cores, November 8th, MeSU User Day Annual meeting of the MeSU users of Sorbonne Université
	Professional Service
2024	
	Reviewer for PDSEC (IPDPS workshop)
	Awards
2019-2020	Best Overall Woman Cranfield University
	In Computational Engineering Sciences.
2019-2020	Best Overall Achievement CRANFIELD UNIVERSITY In the "Software Engineering for Technical Computing" track on the M.Sc. in Computational and Software Techniques in Engineering
	Teaching
2023 - 2024	
	• Distributed systems and processing , $21h$ in Master 2 using C and MPI
	• Fundamentals of C programming , $21h$ in Bachelor 2 using C
	• Shell and scripting language . 12h in Bachelor 2 using Unix and Git
2022 - 2023	
	• Algorithms and Programming , 36h in Bachelor 1 using Python
	• Shell and scripting language , 12h in Bachelor 2 using Unix and Git
2021 - 2022	
	• Algorithms and Programming , 36 <i>h</i> in Bachelor 1 using Python