

Biography of Dr. Hichem Talbi

Dr. Hichem Talbi is a lecturer and researcher in computer science at the Faculty of New Information and Communication Technologies (NTIC), Abdelhamid Mehri Constantine 2 University, Algeria. With over two decades of academic and research experience, Dr. Talbi has established himself as a leading figure in the fields of computational intelligence, optimization, and emerging technologies in Algeria.

He earned his Engineering degree in Computer Science in 2000, followed by a *Magistère* in 2003, and completed his PhD in 2009—all from Constantine University—laying a strong foundation for his academic career. He has been a lecturer at Emir Abdelkader University since 2003 then at Constantine 2 University since 2015. He has also taken on various administrative responsibilities, demonstrating his commitment to institutional development and academic governance. Currently, Dr. Talbi serves as the President of the University Ethics and Professional Conduct Committee. He is also an active member of the National Reflection Committee on Quantum Technologies, contributing to strategic discussions on the development and integration of quantum computing in Algeria's scientific and technological landscape.

Dr. Talbi's research spans a broad spectrum of topics in artificial intelligence and computational optimization, including Artificial Neural Networks, Evolutionary Algorithms, Multiobjective and Combinatorial Optimization, Image Registration and Segmentation, Computer Vision, Parallel Programming, and Quantum Computing. He is particularly renowned for his pioneering work on quantum-inspired evolutionary algorithms, having published influential papers on their application to complex problems such as image registration, the N-Queens problem, and the Traveling Salesman Problem. His recent work continues to push the boundaries of optimization techniques, including contributions to differential evolution, swarm intelligence, and dynamic process modeling.

His scholarly output includes numerous publications in reputable international journals and conferences such as *Applied Soft Computing*, *Swarm and Evolutionary Computation*, *Journal of Universal Computer Science (JUCS)*, and *Theoretical Aspects of Computing – ICTAC*. His 2017 paper on a real-coded quantum-inspired evolutionary algorithm remains a significant reference in the field, highlighting his innovative integration of quantum computing principles into classical optimization frameworks.