Thierry Viéville

63 years old, French, Director of Research (DR1) INRIA, Mnemosyne Research Team and LINE laboratory

Degrees and education:

1993: Diplôme d'Habilitation à Diriger les Recherches en Sciences, Spécialité Vision et Robotique, Université de Nice Sophia-Antipolis.

1985-1988: Doctorat d'Université en Sciences de la Vie et de la Santé, Spécialité de Neurophysiologie, Université Pierre et Marie Curie, Paris VI. 1984-1985: Diplôme d'Etudes Approfondies en Neurosciences, Université Pierre et Marie Curie, Paris VI.

1981-1983: Maıtrise de Mathématiques Fondamentales, Université de Paris VII.

1980-1981: Ingénieur Bio-Médical de l'E.N.S.T. Paris et ingénieur de l'Ecole Nationale Supérieure des Télécommunications de Bretagne.

Academic position:

Thierry Viéville is a Senior Researcher at INRIA (National Research Institute in Computer Science and Control Theory) where he works in Computational Neurosciences (CN) while he teaches and advices PhD students. His research interests after Computer Vision is now Computation Neuroscience, more precisely Visual Perception and Adaptive Processes in Systemic Neuroscience.

He now also collaborates in Educational Science within the LINE laboratory, regarding computational thinking teaching, and learner modeling using cognitive neuroscience and machine learning frameworks, within the AIDE exploratory action. He advised more than 20 PhD students and participated in several international collaborations (including 6 EEC and 4 ANR projects) with WP responsibilities or project lead.

He also helps the INRIA board regarding Science Outreach, has launched the Class´Code program of formation of teachers and educators regarding children computer science education (over 50000 persons impacted).

Publications (selection over the last years):

- Délibérer avec l'intelligence artificielle au service de l'intelligence naturelle (peer-reviewed book chapter) édéric Alexandre, Thierry Viéville, Marie-Hélène Comte, Penser calculer délibérer. Mare & Martin, pp.19, 2022.
- Reinforcement Symbolic Learning (communication with article in preparation) Chloé Mercier, Frédéric Alexandre, Thierry Viéville, ICANN 2021, 30th International Conference on Artificial Neural Networks, Sep 2021, Bratislava.
- Why, What and How to help each Citizen to Understand Artificial Intelligence? (article) Frédéric Alexandre, Jade Becker, Marie-Hélène Comte, Aurelie Lagarrigue, Romain Liblau, Margarida Romero, Thierry Viéville, KI - Künstliche Intelligenz, Springer Nature, 2021, pp.1610-1987
- Formalizing Problem Solving in Computational Thinking : an Ontology approach (communication with article accepted) Chloé Mercier, Lisa Roux, Margarida Romero, Frédéric Alexandre, Thierry Viéville IEEE ICDL 2021 – International Conference on Development and Learning 2021, Aug 2021, Beijing, China
- Ontology as neuronal-space manifold: Towards symbolic and numerical artificial embedding (communication with article accepted) Chloé Mercier, Hugo Chateau-Laurent, Frédéric Alexandre, Thierry Viéville KRHCAI 2021 Workshop on Knowledge Representation for Hybrid & Compositional AI @ KR2021, Nov 2021, Hanoi, Vietnam
- Bio-inspired analysis of deep learning on not-so-big data using data-prototypes (article) T. Drumond, T. Viéville, F. Alexandre. Front. Comput. Neurosci. 2019, 12, pp 100.
- Le jeu du robot : analyse d'une activité d'informatique débranchée sous la perspective de la cognition incarnée (article) M. Romero, M. Duflot, T. Viéville. *Review of science, mathematics and ICT education,* Laboratory of Didactics of Sciences, Mathematics and ICT, Department of Educational Sciences and Early Childhood Education - University of Patras, 2019,.

Total: more that 50 peer-reviewed articles, 130 communications or book chapter, 1 book, 25 multimédia documents, 10 software or midleware and many large audience science outreach publications.

Responsabilities (5 over the last ten years):

2020-2023 : Co-Direction of the AIDE AEx exploratory action.
2018-2021 : Co-Direction of the SmartEdtech Msc of U. Côte d'Azur.
2015-2020 : Development and co-management of the Class´Code (2,5M€) PIA initiative.
2010-2016 : In charge of Science Outreach for the General Direction of Science of the Inria institute.
2010-2013 : Development and management of ANR international KEOpS CN project on the retina.