

Tonglin Yan

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Education

Université Paris-Saclay Orsay, France PhD in Psychology	Oct 2023 – present
<ul style="list-style-type: none">• Advisors: David Rudrauf (Primary), Alain Finkel & Grégoire Sergeant-Perthuis (Co-supervisors)• Thesis: Integration of advanced multimodal machine learning models in the Projective Consciousness Model for the study of non-verbal and verbal social behaviors in virtual reality.	
University of Rouen Normandy Rouen, France M.S. in Data Science and Engineering	Sept 2021 – Sept 2022
INSA Rouen Normandie Rouen, France Engineering degree in Mathematical and Software Engineering	Sept 2017 – Sept 2022

Professional Experience

Algorithm Engineer , GuanYun Technology	Feb 2023 – June 2023
<ul style="list-style-type: none">• Developed a motion capture system using 9-axis IMU sensors.• Simulated human movement in Unity 3D for real-time motion analysis.	
Research Assistant , ISIR, Sorbonne University	Mar 2022 – Sept 2022
<ul style="list-style-type: none">• Designed a pipeline for constructing a biology-focused dataset.• Researched and fine-tuned BERT/T5 models for question-answering tasks, improving task-specific accuracy by 15%.• Evaluated pipeline efficiency and scalability.	
Research Assistant , New York University	June 2021 – Sept 2021
<ul style="list-style-type: none">• Predicted animal trajectories (ants/birds) using time-series analysis.• Cleaned and imputed data via linear regression; extracted features using random forests.	
Part-Time Assistant , Deloitte China	July 2020 – Sept 2020
<ul style="list-style-type: none">• Conducted a case study on retail markdown strategies, analyzing promotional impacts.• Delivered client recommendations via data-driven presentations.	

Academic Experience

ASSC28 , Crete, Greece	July 2025
ASSC27 , Tokyo, Japan	July 2024
Qualia Structure Summer School , Osaka, Japan	June 2024

Publications

PCM-LLMs: A Hybrid Architecture to Enhance Human-like Social Intelligence in Virtual Agents Tonglin Yan, David Rudrauf, Grégoire Perthuis-Sergeant	May 2025
Integrated Information Theory (IIT) with Simple Maths Grégoire Perthuis-Sergeant, Tonglin Yan, Nils Ruet, Kenneth williford, David Rudrauf,	Feb 2024

Skills

Programming: Python (PyTorch, TensorFlow), C#, Java, C++, R
Tools: Unity3D, Blender, OpenSIM
Languages: Mandarin, French, English
Interests: Yoga (Certified Instructor), Chinese Calligraphy, Bouldering, Travel