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GitHub Profile
LinkedIn Profile

Jiayu WANG

PhD student at Sorbonne University

EDUCATION

Since 2022 **Doctorate : Mechanical Engineering** *Paris, France*
Sorbonne Université
Buckling and packing of beams and plates inside liquid cavities

2020 - 2022 **Master Degree : Computational Mechanics** *Paris, France*
Sorbonne Université
Program covers fundamental and advanced topics on solid and structural mechanics, fluid mechanics, and their interactions.

01.2020 - 05.2020 **Exchange semester in NUS** *Singapore*
National University of Singapore
Courses : mechanics of materials, intermediate fluid mechanics, sustainable energy conversion, computational methods in physics, probability and statistics

2017 - 2020 **Bachelor degree : Mechanical Engineering** *Paris, France*
Sorbonne Université
Cursus Master en Ingenierie (CMI) Special program CMI: 5 years intensive and selective education program, an international benchmark of masters of Science in engineering.

EXPERIENCE

Since 10.2022 **L'institut Jean Le Rond d'Alembert, Sorbonne Université** *Paris, France*
PhD student
Supervisor : S. Neukirch and A. Antkowiak
Subject : Buckling and packing of beams and plates inside liquid cavities.
Theoretical and numerical study.

04.2022 - 09.2022 **Process & Energy, 3ME Faculty, TU Delft** *Delft, The Netherlands*
Research Internship / Final year project
Supervisor : B. Bugeat and R. Pecnik
Subject : Transition to turbulence in supercritical fluids
Simulation and analysis of secondary instabilities for boundary layer flow of a supercritical fluid using DNS

05.2021 - 08.2021 **Institut Jean Le Rond D'Alembert, Sorbonne Université** *Paris, France*
Research Internship
Supervisor : A. Antkowiak
Subject : Study of hydrothermal vents' formation and interaction
Theoretical and experimental study

11.2019 - 12.2019 **ISIR, Sorbonne Université** *Paris, France*
Research Internship
Supervisor : L. Saint-Bauzel
Subject : Bio-mechanical assessments of an arm exoskeleton
Using software *OpenSim*, simulating and analysing mechanical effects

05.2018 - 06.2018 **Hangzhou Tiankuan Technology** *Zhejiang, China*
R&D department Assistant
Supervisor : Ming Geng
Subject : Professional discovery internship.
Observation of the work in R&D department. Learning about the product management, patent application, etc.

SCIENTIFIC PARTICIPATIONS

07.2024 **Journées ∂'Alembertiennes** Organizing committee *Saint-Cyr, France*

06.2024 **Fluid and Elasticity conference** Contributed talk *Arcachon, France*

05.2024 **The European Mechanics of Materials Conferences (EMMC)** Contributed talk *Madrid, Spain*

03.2024 **Rencontre du non-linéaires (RNL)** Contributed talk *Paris, France*

10.2023 **MePhy Day: Surface tension, geometry and soft solids** Contributed talk *Paris, France*

06.2023 **CISM Summer course (Interfacial Flows: The Power and Beauty of Asymptotic Methods)**
Poster *Udine, Italy*

TEACHING

2022 - 2025 **Sorbonne Université** *Paris, France*
Chargée de Mission d'Enseignement (64h per year)
LU1MEPY2 : Mécanique - Physique 2, Travaux Pratiques. (2022/23)
LU2ME002 : Bases de la thermodynamique et thermique, Travaux Pratiques. (2022/23, 2023/24)
LU3ME004 : Bases de la mécanique des milieux continus, Travaux Pratiques. (2022/23, 2023/24)
LU2ME006 : Analyse vectorielle et intégrales multiples, Travaux Dirigés. (2023/24, 2024/25)

TECHNICAL STRENGTHS

Computer Languages	Python, C, MATLAB, Mathematica
Numerical Simulation	OpenFoam, FEniCS, CATIA, SolidWorks, Ansys Fluent
Tools	CasADi, LaTeX, git

LANGUAGES

Chinese : Native **French** : Fluent **English** : Fluent