# Xiaoyu SUN

## PERSONAL INFORMATION

Email : < xiaoyu.sun@lis-lab.fr>

Office : TPR2 05.22, 163 Av. de Luminy, 13009 Marseille

Nationality: Chinese

## EDUCATION

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|---|---|
| 12/2022 - | **Doctorale** (UMR7020LIS Laboratoire d'Informatique et Systèmes, CANA). Department of Mathématiques et Informatique de Marseille, Aix-Marseille Université, FR. |
| 10/2020 -10/2021 | **Master of Science** (Quantum Fields and Fundamental Forces -Merit). Department of Physics, Imperial College London, UK. MSc dissertation title "*Topological Magnetic Monopoles and Electroweak Sphalerons*". Dissertation supervisor: Prof. Arttu Rajantie. |
| 09/2016 -06/2020 | **Bachelor of Science** (Materials Physics -Class One Honours). Department of Physics and Astronomy, the University of Sheffield, UK. Personal tutor: Prof. Thompson Lee. |
| | **Bachelor of Engineering** (Materials Science and Engineering –Average Mark: 92.27/100). Department of Oversea Education, Nanjing Tech University, China. |

## TITLE OF THESIS

Near-Term Noisy Quantum Computing

## THESIS SUPERVISORS

Giuseppe DI MOLFETTA <giuseppe.dimolfetta@lis-lab.fr>

Hachem KADRI <hachem.kadri@lis-lab.fr>

## PUBLICATIONS

1. Sun, X., Roget, M., Di Molfetta, G., & Kadri, H. (2025). On Quantum Perceptron Learning via Quantum Search. *arXiv preprint arXiv:2503.17308*.

2. Tian, J., Sun, X., Du, Y., Zhao, S., Liu, Q., Zhang, K., ... & Tao, D. (2023). Recent advances for quantum neural networks in generative learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence, 45(10), 12321-12340.*

## INTERNSHIP & RESEARCH EXPERIENCE

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| 10/2022- 06/2022 | Interned at **Yanqi Lake Beijing Institute of Mathematical Sciences and Applications (BIMSA)** with Prof. Zhengwei Liu in quantum information. |
| 06/2022- 12/2021 | Interned at the **quantum machine learning group at JD explore Academy**, Beijing, China. |

## LANGUAGES

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| Chinese | Native language |
| English | IELTS test (year 2020): Listening: 7.0 Reading: 8.5 Writing: 6.0 Speaking: 6.0 Overall: 7.0 |
| French | A2 |

## PROGRAMMING SKILLS

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| Certificates | Jiangsu Computer Rank Exam Certificate (Jiangsu Province, China)- Grade I. National Computer Rank Exam Certificate (China)- Grade II. |
| Coding | C, python. |