

# SHUOFENG ZHANG

## EDUCATION

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### University of Oxford

DPhil in Theoretical Physics

Theoretical deep learning

### Tsinghua University

Master of Science

Computational physics / material science

### Renmin University of China

Bachelor of Science

Department of physics

## PUBLICATION

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Zhang, Shuofeng, and Ard Louis. “Position: Many generalization measures for deep learning are fragile.” arXiv preprint arXiv:2510.18934 (2025).

Zhang, Shuofeng, and Ard Louis. “Closed-form  $\ell_r$  norm scaling with data for overparameterized linear regression and diagonal linear networks under  $\ell_p$  bias.” arXiv preprint arXiv:2509.21181 (2025).

Zhang, Shuofeng, Isaac Reid, Guillermo Valle Pérez, and Ard Louis. “Why flatness does and does not correlate with generalization for deep neural networks.” arXiv preprint arXiv:2103.06219 (2021).

Zhang, Shuofeng, Ben Xu, Yuanhua Lin, Cewen Nan, and Wei Liu. “First-principles study of the layered thermoelectric material TiNBr.” RSC advances 9, no. 23 (2019): 12886-12894.

Zhang, Xue, Ting Liu, Shuofeng Zhang, Xin Huang, Bingqing Xu, Yuanhua Lin, Ben Xu, Liangliang Li, Ce-Wen Nan, and Yang Shen. “Synergistic coupling between Li<sub>6</sub>. 75La<sub>3</sub>Zr<sub>1</sub>. 75Ta<sub>0</sub>. 25O<sub>12</sub> and poly (vinylidene fluoride) induces high ionic conductivity, mechanical strength, and thermal stability of solid composite electrolytes.” Journal of the American Chemical Society 139, no. 39 (2017): 13779-13785.

## WORKING EXPERIENCE

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(Incoming) Research scientist, Machine learning - **Meta platforms Inc.**

## TEACHING EXPERIENCE

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**Teaching Assistant**, Mathematical Institute - University of Oxford

Symbolic, Numerical and Graphical Scientific Programming, with Prof. Philip Candelas

**Demonstrator**, Department of Physics - University of Oxford

Computing lab, with Dr. Elizabeth Gallas and Dr. Jennifer Barnes

Prelims (First Year) and Part A/B (Second year)

**Senior Demonstrator**, Department of Physics - University of Oxford  
Computing lab, with Dr. Elizabeth Gallas and Dr. Jennifer Barnes  
Prelims (First Year) and Part A/B (Second year)

## **PEER REVIEW SERVICE**

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**Molecular Physics** (2019)