Tuorui Peng

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https://github.com/V1ncent19 https://v1ncent19.github.io/

Education

Department of Physics, Tsinghua University **Sep. 2019 – (June 2023)**

Bachelor of Science in Physics, with Statistics Minor *Beijing*

- Major GPA 3.77/4.0, Minor GPA 3.95/4.0

Relevant Coursework & Modules

- Calculus
- Linear Algebra
- Probability
- Statistical Inference
- Multivariate Statistics
- Linear Regression
- Statistical Computing
- Intro to Data Science
- Time Series Analysis
- Survival Analysis
- Machine Learning
- Intro to Biostatistics

Experiences

Department of Statistics and Data Science, NUS **June 2022 – Present**

Remote Research Assistant *Beijing*

- Studied landscape modification in Simulated Annealing, especially on discrete Hamiltonian, to speed up sampling and optimization process;
- Focused on applicability of spin glass model and replica symmetric theory in explanation of landscape modification.

Center of Statistical Science, Tsinghua Univ. **Dec. 2021 – July 2022**

Student Research Assistant *Beijing*

- Crawled and parsed case-report articles on PubMed to form the PubMed-Center-Patient large-scale dataset of Electronic Medical Record;
- Used PMC-Patient as seed dataset to fine-tune language model for crawling the whole PubMed OA;
- Mapped the citation graph as patients link as database for retrieval system;
- Crawled and parsed medical entity relation pairs from public medical websites to form knowledge graph.

Department of Physics, Tsinghua Univ. **Jan. 2021 – Nov. 2021**

Student Research Training *Beijing*

- Studied on heterogenous junction between metal electrode and low-dimensional semiconductor MoS_2 to explore the characteristic and production technique;
- Different processing methods and techonologies were experimented to develop a better way, obtaining heterogenous junction with more stable and ideal performance;
- Further explored the usage of low-dimensional materials in ionic micro-device.

Skills

Programming: R, Python, C, LaTeX, Mathematica
Developer Tools: VS Code, R Studio
Languages: English (fluent, *with ielts 7.0*), Chinese (native)

Honors & Rewards

Honorable Mention, Mathematical Contest In Modeling (2022)
4th Place in 10m Air Rifle Shooting, Ma Yuehan Cup, Tsinghua University (2021)
5th Place in 10m Air Gun Shooting, Ma Yuehan Cup, Tsinghua University (2021)
Scholarship for Academic Advance (2020)