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)
Scholarship for Academic Advance (2020)