Shaopeng Zhu

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Education

University of Maryland, College Park
Ph.D. student, Compute Science, since 2017.
Currently working on complexity of constraint satisfaction problems of
infinite relational structures (with finite signature).

University of California, Davis
M.S., Computer Science, 2017.
Research advisor: Professor David Doty.
Field: computational complexity of chemical reaction networks.

University of Wisconsin, Madison
LLM-Legal Institutions, 2013.

Peking University
B.A., Laws, 2010.

Publications

(By contribution) Shaopeng Zhu, Shih-Han Hung,
Shouvanik Chakrabarti and Xiaodi Wu.
On the Principles of Differential Quantum Programming Languages.
PLDI 2020: *Proceedings of the 41st ACM SIGPLAN Conference on
Programming Language Design and Implementation. 2020.*

(By contribution) Shih-Han Hung, Kesha Hietala, Shaopeng Zhu,
Mingsheng Ying, Michael Hicks, and Xiaodi Wu.
Quantitative Robustness Analysis of Quantum Programs.
POPL 2019: *Proceedings of the ACM on Programming Languages 3,
no. POPL (2019): 31.*

(In alphabetical order) David Doty and Shaopeng Zhu.
Computational Complexity of Atomic Chemical Reaction Networks.
SOFSEM 2018: *Proceedings of the 44th International Conference on
Current Trends in Theory and Practice of Computer Science.*

Languages and Skills

Proof Assistant: Coq.
Programming: OCaml; Python, C, C++; Matlab. Miscellaneous: LaTeX.
Natural: Chinese (native), English (professional), French (elementary).

Teaching

University of Maryland, College Park
Teaching Assistant, Computer Architecture, 2018, 2020, 2021-22 (ongoing).
Teaching Assistant, Data Structures, 2021.
Teaching Assistant/Grader, Introduction to Cryptography, 2020, 2021.
Teaching Assistant, Discrete Structures, 2017, 2018, 2020.

University of California, Davis
Teaching Assistant, Introduction to Computation Theory, 2015, 2017.
Teaching Assistant, Discrete Mathematics (CS), 2016.
Teaching Assistant, Algorithm Design and Analysis, 2016.
Grader, Introduction to Computation Theory, 2017.

Awards and Fellowships

Teaching Assistants' Fellowship
CS Department, University of Maryland College Park, 2021-22.

Dean's Fellowship
CS Department, University of Maryland College Park, 2017.

Jacob K. Goldhaber Travel Award
Graduate School, University of Maryland College Park, 2017.

International Conference Student Support Award
Graduate School, University of Maryland College Park, 2017.

Miscellaneous Activities

College Park, University of Maryland
workshop on Noisy Intermediate-Scale Quantum (NISQ) Technologies, poster session, 2019.

Boston, Harvard University
Molecular Programming Project, poster session, 2016.