CURRICULUM VITAE

Gang Liu

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Current Position

Ph.D. Student in Computer Science, Kahlert School of Computing, University of Utah *August 2021 - Present*
Advisor: Professor Haitao Wang

Education

- **M.S. in Computing**, University of Utah, Salt Lake City, UT *April 2020*
- **B.S. in Electrical and Computer Engineering**, University of Utah, Salt Lake City, UT *December 2017*

Research Interests

- Computational Geometry, Algorithms and Data Structures, Theoretical Computer Science
- Computer Vision, Machine Learning, Data Visualization

Work Experience

- **Software Developer, Waltusa, Logan, UT** *July 2020 - July 2021*
- **Strategy Data Visualization Intern, U Health, Salt Lake City, UT** *May 2019 - August 2019*
- **Computer Vision Algorithm Intern, IFLYTEK, Hefei, Anhui** *March 2018 - July 2018*

Academic Experience

- **Graduate Research Assistant**
  Designed and developed new data structures and algorithms to tackle complex

challenges in computational geometry, with a research focus on hitting sets and coverage problems.

  - Kahlert School of Computing, University of Utah *August 2022 - Present*
  - Utah State University *August 2021 - July 2022*

- **Teaching Assistant**

  - Advanced Algorithms, University of Utah *Fall 2022, Fall 2023*
  - Artificial Intelligence, Utah State University *Fall 2021*
  - Discrete Structures, University of Utah *Fall 2019, Spring 2020*
  - Digital Signal Processing, University of Utah *Spring 2019*

Publications

Peer-Reviewed Journal Articles

1. Gang Liu and Haitao Wang, *"On the Line-Separable Unit-Disk Coverage and Related Problems"*, Computational Geometry: Theory and Applications (CGTA), Vol. 123, Article No. 102122, pages 1–12, 2024.

Peer-Reviewed Conference Papers

1. Gang Liu and Haitao Wang, *"On Line-Separable Weighted Unit-Disk Coverage and Related Problems"*, Proceedings of the 49th International Symposium on Mathematical Foundations of Computer Science (MFCS), Bratislava, Slovakia, August 2024, pages 70:1-70:16.

2. Gang Liu and Haitao Wang, *"Unweighted Geometric Hitting Set for Line-Constrained Disks and Related Problems"*, Proceedings of the 49th International Symposium on Mathematical Foundations of Computer Science (MFCS), Bratislava, Slovakia, August 2024, pages 68:1-68:15.

3. Gang Liu and Haitao Wang, *"On the Line-Separable Unit-Disk Coverage and Related Problems"*, Proceedings of the 34th International Symposium on Algorithms and Computation (ISAAC), Kyoto, Japan, December 2023, pages 51:1–51:14.

4. Gang Liu and Haitao Wang, *"Geometric Hitting Set for Line-Constrained Disks"*, Proceedings of the 18th Algorithms and Data Structures Symposium (WADS), Montreal, Canada, August 2023, pages 574–587.