Aidao Chen

Contact

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Education

- June 2023 Northwestern University, Evanston, Illinois, US.
- (Expected) Phd in **Computer Science**. Advisor: Anindya De, Aravindan Vijayaraghavan. GPA: 3.895.

2021 Northwestern University, Evanston, Illinois, US. Master of Science in Computer Science (En route).

2017 Fudan University, Shanghai, China.
Bachelor in Computer Science and Technology, Honor Program.
Overall GPA: 3.79/4, Rank: 1/77, Major GPA: 3.93/4 (first three years).

Areas of Interest

Artificial intelligence, Machine learning, Mathematics, Theoretical computer science.

Skills

Programming

 $\label{eq:constraint} \begin{array}{l} \mbox{Proficient: C++ (ACM-ICPC regional 6th place, Gold Medal), C and \mbox{${\tt LTE}$X$}. \\ \mbox{Skillful: Python, Java, Matlab, Mathematica, Bash, C\#, HTML, SQL, JavaScript. } \end{array}$

Learning Theory

Randomized Algorithms, Approximation Algorithms, Applied Probability.

Publications

2019 Bhaskara, Aditya and Chen, Aidao and Perreault, Aidan and Vijayaraghavan, Aravindan **Smoothed** analysis in unsupervised learning via decoupling

Accepted by 2019 IEEE 60th Annual Symposium on Foundations of Computer Science (FOCS). Acceptance rate: 28.9% (92/318).

Journal version

Invited and Accepted by Mathematical Programming 2020, Pages: 549 - 599.

2021 Chen, Aidao and De, Anindya and Vijayaraghavan, Aravindan Learning a mixture of two subspaces over finite fields

Accepted by The Algorithmic Learning Theory (ALT) 2021. Acceptance rate: 29.3%.

2022 Chen, Aidao and De, Anindya and Vijayaraghavan, Aravindan Algorithms for learning a mixture of linear classifiers

Accepted by The Algorithmic Learning Theory (ALT) 2022.

Honors and Awards

- June 2018 STOC Student Travel Grant, issued by ACM.
- Sep 2017 **Data Science Fellowship**, issued by Northwestern University \$8000 cash + \$2500 research allowance.
- Apr 2017 **Excellent Graduate 2017,** issued by Fudan University Offered to the excellent graduate of Fudan University.

- Apr 2016 **EMC Scholarship for Excellent Student,** issued by EMC One in total in the major.
- Dec 2015 Honor Program Scholarship, issued Fudan University Ten in total in the program.
- Nov 2015 **Tung OOCL Scholarship**, issued by Fudan University Three in total in the major.
- Dec 2014 ACM-ICPC programming contest, 6th place, gold medal, Shanghai regional, issued by ACM.
- Oct 2014 ACM-ICPC programming contest, silver medal, Mudanjiang regional, issued by ACM.

Teaching

- Winter 2022 Teaching Assistant, Northwestern CS 496 Graduate Algorithms.
- Winter 2022 Teaching Assistant, Northwestern CS 496 Foundations of Quantum Computing and Quantum Information.
- Spring 2020 Teaching Assistant, Northwestern CS 336 Design & Analysis of Algorithms.
- Fall 2018 Teaching Assistant, Northwestern CS 335 Intro to the Theory of Computation.
- Spring 2018 Teaching Assistant, Northwestern CS 212 Mathematical Foundations of Computer Science.

Selected Courses

Theoretical Machine Learning(A) Computer Vision(A) Algebra Structure and Mathematical logic(A) Compilers(A) Algorithm Design and Analysis(A-) Computer Architecture(A) Computational Geometry(A) Real Analysis I/II/III(A/A/A) Computational Complexity(A) Graduate Algorithms(A) Randomized Algorithms(A) Approximation Algorithms(A) Intro to the Theory of numbers I/II(A/A)Intro to Topology I/II(A/A)Set Theory and Graph Theory(A) Operating Systems(A) Probability Theory and Mathematical Statistics(A) Data Structure(A) Introduction to Database Systems(A) Linear Algebra(A-)

Service

Reviewer: European Symposium on Algorithms 2019.