Xiao Mao

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Education

- **Massachusetts Institute of Technology** *2021 to present*
  M.Eng.
  - Thesis Supervisor: Virginia Vassilevska Williams
- **Massachusetts Institute of Technology** *2017 to 2021*
  B.S. in Computer Science and Engineering and in Mathematics

Research and Work Experience

- **Massachusetts Institute of Technology** *Sep. 2021 to present*
  M.Eng. with thesis supervised by Professor Virginia Vassilevska Williams
  - Focus on algorithms and complexity.
- **Massachusetts Institute of Technology** *Feb. 2020 to Dec. 2020*
  UROP advised by Professor Michael Sipser
  - Research projects on algorithms and complexity. Finished two manuscripts.
- **Microsoft Corporation, Bellevue, WA** *Summer 2019*
  Intern
  - Studied Hopscotch Hashing and its performance, both theoretical and practical.
- **Pony.ai, Inc., Fremont, CA** *Summer 2018*
  Intern
  - Migrated the build tool from Bash to a 1000-line standardized Python script with improved functionality.

Publications

[1] Xiao Mao. Breaking the Cubic Barrier for (Unweighted) Tree Edit Distance. In *Proceedings of the 62nd IEEE Symposium on Foundations of Computer Science (FOCS)*, 2021.
(Machtey Award for Best Student Paper.)

Older Manuscripts

[1] Xiao Mao. Shortest non-separating st-path on chordal graphs. 2020

[2] Xiao Mao. A natural extension to the convex hull problem and a novel solution. 2020

Selected Awards and Scholarships

- **International Olympiad in Informatics** *July to August 2017*
  Silver medal
- **National Olympiad in Informatics, China** *July 2016*
  Gold medal, 1st place

Talks

- **Breaking the Cubic Barrier for (Unweighted) Tree Edit Distance**
  – FOCS 2021 *Feb 2022*
  – Yao Class seminar *Sep 2021*

Service

- Conference Reviewing: ITCS 2022