

# Ke Shi

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## EDUCATION

**University of Electronic Science and Technology of China**

*Bachelor in Computer Science (also **Honor Bachelor**); GPA: 3.88/4.00*

**ChengDu, China**

*Sep 2019 – Jun 2023*

**University of Science and Technology of China**

*Master's student in Computer Science; GPA: 4.11/4.30*

**HeFei, China**

*Sep 2023 – Jun 2026 (Expected)*

## PUBLICATIONS

**A Polynomial Time Algorithm for Finding a Minimum 4-Partition of a Submodular Function**

*Tsuyoshi Hirayama, Yuhao Liu, Kazuhisa Makino, Ke Shi, Chao Xu    SODA 2023 & Mathematical Programming 2023*

**Almost optimal  $\ell$ -coveing of  $\mathbb{Z}_n$**

*Ke Shi, Chao Xu*

*COCOON 2024*

## MANUSCRIPTS

**Strong spatial mixing for the matching polynomial: A simple proof via Heilmann–Lieb Theorem**

*Shuai Shao, Ke Shi*

**Strong Spatial Mixing for Ferromagnetic Ising Models: A Novel Perspective from Edge Activity**

*Shuai Shao, Ke Shi*

**An Optimal Algorithm for the Stack Crane Problem on Fixed Topologies**

*Yike Chen, Ke Shi, Chao Xu*

## COMPETITIONS

**14th National College Student Mathematics Competition**

*Non-Mathematics Majors Group*

**Champion (Finals)**

*May 2023*

**13th National College Student Mathematics Competition**

*Non-Mathematics Majors Group, postponed due to COVID-19*

**First Prize (Finals)**

*Mar 2023*

**12th National College Student Mathematics Competition**

*Non-Mathematics Majors Group*

**First Prize (Finals)**

*May 2021*

## OPENSOURCE CONTRIBUTION

**Google Summer of Code 2024**

*supported by Google*

**GeomScale / Dingo**

*Jul 2024 – Aug 2024*

**Open Source Promotion Plan 2024**

*supported by Institute of Software Chinese Academy of Sciences*

**Mogan Editor**

*Jul 2024 – Sep 2024*

## WORK EXPERIENCE

**Vortex**

*SDE Intern*

**China**

*Oct 2024*

**Vortex**

*Algorithm Engineer Intern*

**China**

*May 2025 – Oct 2025 (Expected)*