

**Yuan (Charles) Cui**    ycui@oberlin.edu | 440-669-4300

## EDUCATION

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**Oberlin College**

**Bachelor of Arts**

Major: Mathematics and Computer Science

**GPA: 4.14**

Expected Graduation: May 2020

## PROGRAMMING SKILLS

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Python, R, Mathematica,  $\LaTeX$ .

## RELATED COURSES

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STAT 339: Probabilistic Modeling and Machine Learning; MATH 331: Linear Optimization; MATH 232: Linear Algebra; MATH 995H: Numerical Analysis (*in progress*); CSCI 385: Economics and Computation (*in progress*); CSCI 280: Algorithms; CSCI 151: Data Structures; CSCI 241: Systems Programming; MATH 301: Foundations of Analysis; ECON 206: Principles of Finance (*in progress*)

## EXPERIENCE

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**Student Researcher**

*Oberlin College*, July 2017 - Present

- **Returns on Privacy: Phase Transitions in Repeated Sales** - Collaboration with Samuel Taggart, Ezra Goss, and Rachel Cummings. Submitted to Innovations in Theoretical Computer Science (ITCS 2019) in September of 2018. Listed as an author.
- **An Infinite Hidden Markov Model with Similarity-Biased Transitions** - Studied the Hierarchical Dirichlet Process Hidden Markov Model (HDP-HMM) built by my professor and added more documentations in the code base. Experimented with replacing a C++ implementation of a Hidden Markov Model with Python and found negligible gains.

**Teaching Assistant**

*Oberlin College*, February 2017 - May 2018

- **Grader**: MATH 220: Discrete Mathematics; MATH 232: Linear Algebra; CSCI 150: Introduction to Computer Science
- **OWLS (The Oberlin Workshop and Learning Sessions) Leader**: Served as an OWLS leader for MATH 132 (Calc Ib: Integration and Applications). Drafted worksheets of problems and practice exams, and held problem sessions every Monday and Wednesday.
- **Lab Helper**: Worked in the college computer lab every Saturday to help students with their assignments.

**Communications Intern**

*Bamboo Bicycles Beijing & Beyond*, December 2017 - January 2018

- Interviewed six former volunteers, workshop participants, and employees on maker creativity and the environment. Published articles about interviewees in both Chinese and English on WeChat.

**Budapest Semesters in Mathematics**

January 2019 - May 2019

- Accepted into the Budapest Semesters in Mathematics program. Will study mathematics and Hungarian in Budapest from January to May in 2019.

## LANGUAGES

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Fluent in English and Chinese, and beginner in Japanese.