

Terry Ma

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EDUCATION:

BS in Computer Science, Georgia Institute of Technology

2021-2023

SKILLS:

TOOLS

IntelliJ IDEA, JUnit Testing, MS Visual Studio

LANGUAGES

Python, Java, JavaScript, C, C++, Assembly, R, HTML, CSS

CLOUD

Docker, Firebase

EXTERNAL RESREARCH GRANT:

· XSEDE EMPOWER Research Grant, (PI) Konasale Prasad,

2021

HONORS AND AWARDS:

- Zell Miller Scholarship, 2021
- Top 150, US National Chemistry Olympiad, 2020
- Qualifier, US National Chemistry Olympiad, 2019 and 2020
- Gold, President's Volunteer Service Award, 2020
- Certificate of Merit, University of Georgia, 2020
- AP Chemistry Student of the Year, Lambert High School, 2019
- First Place, Northwest Georgia Regional Science and Engineering Fair, 2018-2019
- International Finalist, S.-T. Yau High School Science Award, 2018
- Smart 50 Award, Smart City Connect Expo, 2018
- Third Honors, Georgia Science and Engineering Fair, 2018
- First Place, GAME Math Contest, 2017
- Gold Award, President's Education Award 2017
- GMEA Allstate Orchestra 2017

PUBLICATIONS:

- **Ma, T.**, Xiao, D. and Xing, X., MetaBMF: a scalable binning algorithm for largescale reference-free metagenomic studies, *Bioinformatics*, 36: 356–363, <https://doi.org/10.1093/bioinformatics/btz577>
- **Ma, T.** and Xing, X. (2018) MetaMat: Reference-free metagenomic binning by matrix deconvolution, *Proceedings of the 14th International Symposium on Bioinformatics Research and Applications (ISBRA)*, Beijing, China 2018.

PRESENTATIONS:

- Invited Speaker, MetaMat: Reference-free metagenomic binning by matrix deconvolution, *The 14th International Symposium on Bioinformatics Research and Applications (ISBRA)*, 2018
- Invited Colloquium/Seminar Presentation, Reference-free metagenomic binning by matrix deconvolution, *Computational Systems Biology Lab*, University of Georgia, 2018

RESEARCH EXPERIENCE:

- Internship at Jun Liu Lab, Harvard: Summers 2018-2019 ○ Worked in the lab, presented in lab meetings, conducted research, wrote reports, presented outcomes, published a paper as the first author
- Internship with Professor Yao Xie, Georgia Tech: 2019-Present ○ Attended lab meetings, supervised by the PI and worked with lab members to develop a method for redrawing police precincts to minimize response time
- Internship at Big Data Analytics Lab, University of Georgia: 2017-Present ○ Attended journal clubs and lab meetings, learned computational methods, explored research directions, and collaborated with graduate students
- Internship at Visible Heart: 2018-Present ○ Collaborated with engineers to implement automatic tracking on echocardiograms of coronary heart disease patients, contributed to business planning
- Created Biomedical Knowledge Discovery Tool (<https://bdal.shinyapps.io/BKF-system/>) ○ Developed a free knowledge discovery tool that helps researchers repurpose existing medicines for COVID-19 via mining large-volume medical literature

WORKING EXPERIENCE

- . Music Producer and Youtuber 2020-Present
 - o Makes Instrumentals and has 12000+ subscribers with over \$10,000 of gross annual revenue and 1.4 million total views, produced for iQiYi New Generation Hip Hop Project TV Show
- . Teaching, 2017
 - o Taught English to over 200 children in rural Yunnan, China

SYNERGETIC ACTIVITY AND COMMUNITY SERVICE

- . Volunteer, The Beijing Meijiang Education Foundation: o Fundraising for the Meijiang Scholarship to raise funds for Uyghur children education o Supervised annual trip for Meijiang Scholarship recipients
- . President, Chemistry Olympiad Club, 2019-Present o Attended lab meetings, supervised by the PI and worked with lab members to develop a method for redrawing police precincts to minimize response time
- . Volunteer violinist for charitable causes, o Played at senior homes, state government events, and state fairs

PRIMARY COURSES TAKEN AT GEORGIA TECH:

- . BIOS 2600 Genetics
- . BIOS 4510/8510 Epigenetics
- . ISYE 3770 Statistics & Applications
- . CHEM 2311 Organic Chemistry 1
- . CS 1301 Introduction to Computer Science
- . CS 1331 Introduction to Object Oriented Programming
- . ECON 2106 Principles of Microeconomics
- . ECON 2105 Principles of Macroeconomics
- . MATH 1554 Linear Algebra
- . MATH 2551 Multivariable Calculus
- . MATH 2552 Differential Equations
- . MATH/CX 4640 Numerical Analysis 1
- . MATH 3012 Applied Combinatorics
- . CS 1332 Data Structures and Algorithms
- . CS 2110 Computer Organization and Programming
- . PHYS 2211 Physics 1

