

Stephen Shang Yi Liu

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Education

Case Western Reserve University **Cleveland, Ohio**
M.Sc. Mathematics, Cumulative GPA: 4.00 2018–2020

Master's Thesis: "On the asymptotic behavior of the magnitude function for odd-dimensional Euclidean balls" advised by Professor Mark Meckes

Case Western Reserve University **Cleveland, Ohio**
B.Sc. Applied Mathematics, summa cum laude, Cumulative GPA: 3.975 2016–2020

Senior Thesis: "The Magnitude of a Finite Metric Space" advised by Professor Mark Meckes

Chinese International School **Hong Kong, Hong Kong S.A.R.**
Bilingual I.B. Diploma, Final Score: 41/45 2009–2016

Mathematics HL, English A Literature HL, Computer Science HL, Chinese A Language and Literature SL, History SL, Physics SL

Employment

EMALI.IO **Hong Kong**
Blockchain Engineer June 2020 – Present

Prototyped and developed blockchain applications using Hyperledger Fabric and Algorand. Administered training for other engineers on blockchain technology.

EMALI.IO **Hong Kong**
Software Development Intern Summer 2019

Prototyped front-end and back-end web services utilizing blockchain technology (Hyperledger Fabric and Hyperledger Composer). Produced and presented training materials for learning blockchain technology for an audience of 10 engineers at a large logistics company.

Case Western Reserve University
Supplemental Instruction Leader Spring 2017–Spring 2018; Fall 2019 – Spring 2020

Taught optional group tutoring sessions for students in 1st and 2nd year engineering and computer science courses (introduction to materials science and data structures and algorithms course). Sessions were twice a week for a duration of 1.5 hours each routinely with an attendance of 20 - 40 students. Designed and lead group activities for students to review material covered in lecture and practice problem solving techniques required for homework and exams.

Chatly.com (formerly The Momentum Group) **Guangzhou, China**
Software Development Intern Summer 2017

Developed chatbots using Node.js and Microsoft Botbuilder Framework for integration into WeChat Messenger. Built in-house chatbot administration system for on-demand creation of new chatbots with custom conversation trees.

Projects and Research

Case Western Reserve University
Master's Thesis Fall 2019 - Spring 2020

Title: On the asymptotic behavior of the magnitude function for odd-dimensional Euclidean balls

Case Western Reserve University
Senior Thesis Spring 2019

The Magnitude of a Finite Metric Space

Case Western Reserve University*Undergraduate Reading Course**Summer 2018*

Reading course in category theory, following “Basic Category Theory” by Tom Leinster (University of Edinburgh)

Honors, Awards and Scholarships

Case Western Reserve University*The Max Morris Prize**Spring 2020*

For excellence in mathematics to a student pursuing the Bachelor of Science degree.

Case Western Reserve University*Phi Beta Kappa Award**Spring 2018*

Awarded to sophomores with highest grade point average.

Case Western Reserve University*Dean's High Honors**2016–2020***Chinese International School***Konberg Ngai Award for Bilingual Excellence**Spring 2016***Skills**

Languages: Fluent in English, Putonghua and Cantonese

Technology: Java (including Spring), Python, Arduino, Javascript (Node.js), MATLAB and LaTeX.
Blockchain technology including Hyperledger Fabric and Algorand.