

John Yang

516-305-2985 | inf@gatech.edu | johnnyraaags@gmail.com

EDUCATION

Georgia Institute of Technology

B.S. in Pure Mathematics, B.S. in Computer Science, B.S. in Economics

Atlanta, GA

Expected Graduation 2026

CUNY Hunter College

B.A./M.A. in Pure Mathematics, B.A. in Computer Science, B.A. in Economics

New York, NY

Jan. 2022 – Aug. 2024

Hunter College High School

High School Diploma

New York, NY

Sept. 2017 – June 2023

Relevant coursework: Measure theory and advanced real analysis, algebraic and point-set topology, algebraic geometry, algebra with Galois theory, Bayesian statistics, probability theory, intermediate macroeconomics, econometrics, game theory, complex analysis, combinatorics, advanced linear algebra, dynamical systems, computer theory and finite automata, data structures and algorithms, computer architecture and organization, data science, most of the STEM AP classes.

EXPERIENCE

Welding and Craft Apprenticeship, Prototype Instructor

ISGT at Georgia Institute of Technology

Sept. 2024 – Present

Atlanta, GA

- Maintain and specialize in operation of TIG/MIG welders, embroidery and various other craft tools.
- Train and assist users on fabrication tasks in the largest student-run makerspace in North America.
- Conduct interviews and do general administrative and accounting work.

Hall Council Finance Officer

Georgia Institute of Technology

Oct. 2024 – Present

Atlanta, GA

- Managed finances and budget for residence hall, hosted many events.
- Communicated with hall directors and administrators on various administrative issues.
- Developed and maintained spreadsheets for keeping track of operations.

Hunter Economics and Finance Team President and Captain

Hunter College High School

Sep. 2021 – June 2023

New York, NY

- Coached three teams of twelve members total and taught introductory and intermediate economics. Wrote complete lecture material, notes and competition problem sets.
- The team was relatively unknown in 2021, grew to become the New York State and national champions in various competitions (see next point).
- 1st place internationally HPEC 2022, 2023, 3rd place nationally in NEC 2020, 2023, 1st place NY State NPFC, NEC 2023

Various Competition and Leadership Positions

Hunter College High School

Sep. 2017 – June 2023

New York, NY

- 1st place in HawkHacks 2023 hackathon.
- 3rd place in Purple Comet! 2023 Math Competition.
- 1st place in 2018 NY Science Bowl, 2022 NY History Bowl.

PROJECTS

SimCo Scraper and Market Optimizer | *Python and various libraries*

2022 – 2023

- Scraped market data from Sim Companies, an economy simulation
- Reverse engineered various market mechanisms, found equilibrium distribution for economic cycles
- Piped all previous data into a mathematical model (involving constrained optimization and discounting) to find the most profitable goods and services.

LC-3 Processor | *CircuitSim, C, Assembly*

Spring 2025

- Implemented a basic LC-3 processor in CircuitSim.
- Incorporated ALU, registers, control logic, ISA, microcontroller.

- A 3D model of a fencer is simplified into far fewer polygons.
- These polygons are flattened and cut out on a waterjet.
- Waterjetted parts are then TIG welded together into the simplified polygonal model.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, LC-3 Assembly, *L*^A*T*_E*X*, Mandarin

Tools: TIG/MIG welder, lathe, manual mill, laser cutter, waterjet, most handheld power tools, Git, Pandas, Excel/Google Sheets, VS Code, Photoshop, Inkscape, Stata, JUnit

FUN STUFF

Sports: Sabre fencing (NCAA Div III), casual rock climbing, cycling

Academics: Solving contrived puzzles, directed reading programs in model theory, graduate game theory, currently leading a reading group in advanced (PhD-level) microeconomics