

KEVIN WU

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2730 N. Greenview Ave. Apt. J
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EDUCATION

- PhD Georgia Tech** (Atlanta, GA) Expected June 2026
Operations Research
- BS Northwestern University** (Evanston, IL) June 2022
Majors: Computer Science, Mathematics, Integrated Science Program
GPA: 3.95/4.00, Tau Beta Pi
Integrated Science Program: a highly selective honors curriculum of science and math

RELEVANT COURSEWORK

Computer Science: Data Structures & Algorithms, Design & Analysis of Algorithms, Computer Networking, Machine Learning, Creative Applications with Machine Learning

Math: Linear Algebra, Fourier Analysis, Complex Analysis, Abstract Algebra

RESEARCH EXPERIENCE

- Tyo Group, Northwestern University** Jan. 2020 – Jun. 2022
Department of Chemical and Biological Engineering
Advisor: Professor Keith Tyo
- Performing protein purification and expression and running pools of multiplexed reactions in order to study protein-protein interaction and protein promiscuity
 - Coding data analysis tools and visualizations using Python
 - Developing a machine learning model to analyze results and predict future reactions

- Wang Cryptography Group, Northwestern University** Mar. 2021 – Mar. 2022
Department of Computer Science
Advisor: Professor Xiao Wang
- Studying cryptographic schemes that resist quantum computing attacks
 - Researching techniques including short integer solution, learning with errors, and lattice-based cryptography

- Research in Science & Engineering, Boston University** Jun. 2017 – Jul. 2017
RISE Program: Department of Biology
Advisor: Dr. Brent Little
- Conducting self-designed experiments with *E. Coli* and presenting findings
 - Performing genetic lab procedures such as DNA extraction, PCR, and gel electrophoresis

AWARDS & ACHIEVEMENTS

- Tau Beta Pi Junior Inductee** Oct. 2020
Engineering Honors Society: top ~12.5% of Northwestern juniors
- AT&T Intern Innovation Challenge** Jul. 2020
Best Overall, Most Impactful and Most Innovative Awards
Design competition among ~25 intern teams
- DTC Best Communication Award** Mar. 2019
Design Thinking and Communication
Design project competition among ~20 teams
- Northwestern University's Dean List** Sep. 2018 - Jun. 2021
(Honors: 4 academic quarters, High Honors: 4 academic quarters)
Award for academic excellence.
- USA Math Olympiad (USAMO) Qualifier** 2017

TEACHING EXPERIENCE

- Teaching Assistant, Northwestern University** Sep. 2021 - Present
Department of Mathematics
Course: Single Variable Calculus
- Leading discussion sections (~20 students), holding weekly office hours, grading homework, grading and proctoring exams
- Mathematics Study Group Leader, Northwestern University** Sep. 2019 - Present
Academic Support and Learning Advancement (ASLA)
- Leading supplementary math study groups (~10 students), lecturing, tutoring, and assigning practice problems
- Counselor, University of Chicago** Jun. 2018 – Jul. 2018
Young Scholars Program (YSP)
- Leading groups of middle school students (~5 students), teaching number theory and introductory Java

WORK EXPERIENCE

- Amazon** Jun. 2021 – Sep. 2021, May 2022 – Aug. 2022
Software Engineer Intern
- Developing a cross-team library that supports region and time-based rollouts for A/B testing and risk mitigation for new features of the trailer routing algorithm
 - Creating a Redshift data pipeline and QuickSight dashboard to display network performance, supporting 4 drill-down levels, 3 time aggregates, and granular queries

- Holding design reviews, creating pipeline infrastructure, and writing business logic
- Conducting end-to-end testing and demoing to my team's larger organization

AT&T

Jun. 2020 – Aug. 2020

Software Engineer Intern

- Developing in an Agile scrum team and completing user stories to support modernization of infrastructure towards microservices
- Collaborating with peers in the Intern Innovation Challenge to design a product that supports online teaching; competing among 25 teams to win Best Overall

LANGUAGES & SKILLS

Languages: English (native), Mandarin Chinese (advanced speaking and listening, intermediate reading and writing)

Programming: Java, Python (NumPy, Pandas), C++, JavaScript (NodeJS, Angular), SQL