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## **EDUCATION & ECs**

#### **PRINCETON UNIVERSITY**

B.S.E. STUDENT | CLASS OF 2025 | GPA UW 3.9/4.0 | Princeton, NJ

- Major: Computer Science (COS). Minors: Optimization and Quantitative Decision Science, Applied and Computational Mathematics, Statistics & Machine Learning
- Relevant courses: Economics and Computing, Natural Language Processing, Probability and Stochastic Systems, Adv. Vector Calc (MAT203), Adv. Linear Algebra w/ Applications (MAT204), Algorithms & Data Structures (COS226), Fundamentals of Statistics, Adv. Physics (Mechanics), Macroeconomics
- CTO-designate for The Daily Princetonian. TA for MAT203/204 & COS226. Member of: Prospect Student Ventures, Debate Panel, Women in Entrepreneurship

#### **OXFORD UNIVERSITY**

(UPCOMING) SEMESTER ABROAD – SPRING 2024

Will complete 4 in-depth tutorial style CS courses during Hilary and Trinity terms.

## UNIVERSITY OF CHICAGO MASTERS PROGRAM IN COMPUTER SCIENCE (MPCS)

Non-degree-seeking high school student | 2019-21 Chicago, IL

 Courses: iOS Application Development (Grade: A);
Algorithms (Grade: A); Intro to Software Engg (Grade: A)

# UNIVERSITY OF CHICAGO LABORATORY SCHOOLS

HIGH SCHOOL DIPLOMA | CLASS OF 2021 | GPA UW 4.0/4.0 | Chicago, IL

Awards: Brian Swan award for AT Physics I, Achievement in CS, Eunice H. McGuire Excellence in Writing (finalist).

## **APTITUDE & SKILLS**

#### STANDARDIZED TEST SCORES & AWARDS

SAT 1590/1600 [Aug '20] • ACT 36/36 [Dec '19] • National Merit Scholarship 2021 Finalist: 224/226 • 2021 Semifinalist for U.S. Presidential Scholars Program • SAT Math 2: 800 • SAT Physics: 790

#### SOFTWARE SKILL SETS

 ${\sf MacOS} \bullet {\sf Windows} \bullet {\sf Linux/Unix} \bullet {\sf C/C++} \bullet {\sf Java} \bullet {\sf Python} \bullet {\sf Bash} \bullet {\sf TypeScript} \bullet {\sf Swift} \bullet {\sf React}$ 

• Node.js • LaTeX • SQL • NumPy + Pandas • MATLAB • R • Fusion 360 • Blender • Flask

• PyQt5 • PyTorch • AWS • Kafka • InfluxDB • Grafana • Docker **BLOOMBERG** • Completed "Bloomberg Market Concepts" course

Music • Piano—completed all 12 levels of Achievement in Music (AIM) program.

### **EXPERIENCE**

## **ALTAMONT CAPITAL PARTNERS** [link]

SOPHOMORE SUMMER ANALYST | Jun 2023 – Aug 2023 | San Francisco, CA

Working with one of Altamont's private equity portfolio companies in strategy and analysis.

## D.E. SHAW DISCOVERY FELLOWSHIP [link]

Nominated Student | Aug 2022 | New York, NY

Selective three-day program for a small group of sophomore-year undergraduate women. Invited to D.E. Shaw's headquarters to learn about the intersection of finance and technology through interactive case studies and seminars.

#### CME GROUP [link]

INTERN - PRODUCTION ENGINEERING TEAM | May 2022-Aug 2022 | Chicago, IL

♦ Implemented Robot Framework to automate end-to-end execution of MiFID report generation, kicking off a multi-year project to replace existing framework. This included building an order entry library in Python to interact with Globex—CME's ETS—via Simple Binary Encoding (SBE).

#### **STARTUP - STEALTH MODE**

SWE - CORE TEAM | May 2022-May 2023 | Remote

Application build-out for a product for the Construction & Engineering Industry. VC-backed.

#### ARTIFICIAL INTELLIGENCE FOR 3D DATA - UCHICAGO 3DL [link]

RESEARCH INTERN | June 2022-Oct 2022 | Chicago, IL

♦ Worked with Assistant Prof Rana Hanocka at 3DL (researches deep learning methods applied to 3D computer graphics/vision). Aided development of an extension to the **Text2Mesh** project.

#### APPLIED AI/ML AT UCHICAGO SAND LAB [link]

SUMMER RESEARCH ASSISTANT | Jun 2021-Aug 2021 | Chicago, IL

- ❖ Worked with Professor Ben Y. Zhao and Emily Wenger at the University of Chicago **SAND Lab** through the Data Science Institute (DSI) Summer Lab program.
- Conducted research on physical backdoor attacks in computer vision models. Developed automatic graph analysis techniques to uncover viable triggers in pre- existing datasets. Co-first author on paper, accepted to NeurIPS 2022 dataset track.

## COMPUTER-AIDED DIAGNOSIS: UCHICAGO GIGER LAB ML/AI [link]

RESEARCH ASSISTANT | Jun 2020 - Jun 2021 | Chicago, IL

- ❖ Worked with Dr. Maryellen Giger, to compare abbreviated/ultrafast breast MRI lesion segmentation methods, including segmentation via convolutional neural networks.
- ❖ First author of research abstract accepted to Optics & Photonics organization SPIE's Medical Imaging Conference, Feb 2021—delivered an oral presentation.

## CITADEL [link]

INTERN - EQUITIES DATA ENGINEERING TEAM | Jun 2019 - Aug 2019 | Chicago, IL

- Built usage-tracking architecture and ETL process "milestone" dashboard with Kafka, InfluxDB
- Evaluation/feedback from my manager: "What makes Roma stand out is her willingness to take on something unknown and her ability to learn it through doing research ... and build that knowledge without hesitation. [This] will make her an exceptional engineer in the future."