# sajeel khan

I'm an undergraduate student and amateur programmer interested in the intersection of computer science and mathematics.

sajeelk1@umbc.edu
sajeelk.github.io

# experience-

#### **Shadowing mathematicians**

AUG 13-17, 2019

Learned research skills from Dr. Elden Elmanto and Dr. Adeel Khan at Harvard University during a collaborative project in algebraic geometry.

Majlis Khuddamul Ahmadiyya USA, Social media director, Baltimore chapter DEC 2019-PRESENT

Manage Twitter account for local Muslim youth group.

#### Ahmadiyya Muslim Community USA, Bookstore cashier

AUG 2016-PRESENT

Manage interactions with customers. Update online inventory.

# independent projects-

## Healthcare data migration tool 2019

Built a script for a local healthcare system to process and report half a million raw medical records—physician's preference card surgical data—to be compatible with a new system during a migration process from Meditech healthcare system to Epic. Using Python.

#### Al: TicTacToe Impossible Bot 2019

Built an AI that implements the recursive minimax algorithm and alpha-beta pruning to determine the best move given any TicTacToe position. Using Python.

## Twitter bot: @NewStudyBot 2017

Developed Twitter bot to use artificial intelligence to automatically calculate what new research studies are valid and retweet them, as a service to aid journalists who cover emerging research. Using Python.

## honors-

#### National Merit Scholarship Corporation 2020

Earned Letter of Commendation for being among the highest-scoring students on the 2019 PSAT/NMSQT.

#### Johns Hopkins University, Center for Talented Youth 2017

Earned Certificate of High Honors for being among the highest-scoring students in the 2016-17 CTY Talent Search.

# education-

# University of Maryland, Baltimore County

AUG 2021 - MAY 2025 Computer Science B.S. Mathematics B.S. Accelerated Masters

## **Dulaney High School**

AUG 2017 - MAY 2021

## relevant coursework-

**Calculus III,** Community College of Baltimore County SPRING 2020

**Linear Algebra,** Community College of Baltimore County FALL 2019

**Calculus I,** University of Maryland, Baltimore County FALL 2018

Python For Everybody specialization, University of Michigan FALL 2016

#### skills-

**Programming** Python, Ruby, Java **Web development** HTML5, CSS3, JS, Bootstrap **Machine learning** 

#### certifications-

Front-End Web UI Frameworks and Tools: Bootstrap 4, The Hong Kong University of Science and Technology JUL 2021

**Usable Security,** University of Maryland, College Park FALL 2017