## **EDUCATION**

## **Stony Brook University**

**Major: Computer Science** (Relevant Completed Courses: Data Structures, Multivariable Calculus, Linear Algebra)

**Expected Graduation: June 2023** 

GPA: 3.86

## **WORK EXPERIENCE**

### **STI: Saif Tutorial Institute**

- Full-Time summer Instructor for SAT I, and II
  - Taught Full time SAT and SAT II, gaining vast knowledge in efficient Mathematical Models and algorithms. Helped build fundamental logic by teaching under pressure.

July 2015-June 2018

#### **PROJECTS**

- My Website: walid-z-khan.me
- https://github.com/walid101/walid-khan.me
- Built a neatly formatted website, with smooth animation between sections using various libraries and tools. This is my personal website with project examples and demos. JavaScript, HTML, CSS, Visual Studio
- OpenCV to Robot Arm
- https://devpost.com/walid101?ref\_content=user-portfolio&ref\_f eature=portfolio&ref\_medium=global-nav
- Built a custom hand detection algorithm with the OpenCV library using a cloud source library (MQTT) to communicate with the Arduino. Java, Python
- Android and Desktop Game
- https://github.com/walid101/InfinityGame Built an android game mimicking a traditional Indie game using the LibGDX game engine and Android Studio as a summer project, fully made with appropriate backends. Java, Android Studio
- \* Hackathon Game (HackNY): Contributor
- https://github.com/FrezCold/District1128
- Built with the LibGDX engine for the HackNY Hackathon aimed at solving the huge trash issue in the United States. Java, Android Studio
- MakeHarvard Hackathon (2020): Lead Programmer
- https://devpost.com/software/r-cubed-6twh1n
- https://github.com/walid101/TensorFlow-Arduino-App
- Built a comprehensive image recognition and Bluetooth transmission app for the Arduino using Android Studio. The program is efficient enough to run on just the processing power of a phone.
- Java, C#, Arduino, TensorFlow

#### **ACHIEVEMENTS**

#### **Programming Captain for team 12178 (FTC)**

- Main Programmer for High School Robotics Team
  - Used applied physics to create the first-ever Holonomic Drive on a four-wheel vehicle. Won 6th in the state during the 2018-2019 season at Townsend Harris Highschool.
  - Recipient of the Innovation Award Twice in both Townsend Harris and Francis Lewis competitions

Sept 2018 - March 2019

#### Lead Programmer in HackNY Hackathon (2019)

- Main Programmer for High School Hackathon Team
- Created a game to change the mindset of the American people. The task at hand was to solve the major garbage issue, determining that if a game can reach out to multiple people, the efficiency of a 100 people motivated to shift their paradigms slightly is far better than building one robot. (Won Most Advanced Project Award)

Dec 2018 - July 2019

# Won 4th place in Circuits, Division C of Science Olympiad (2019)

Team A member in division C of Science Olympiad
Won circuits division in States Competition
4th Place in States Competition (2019)

Won 11th Place in Thermodynamics (2018)

Dec 2018 - Feb 2019

#### TECHNICAL SKILL SET

#### Front End Technologies

- HTML (Competent)
- CSS (Competent)
- JavaScript (Competent)

#### **Back End Technologies**

- Java (Advanced)
- Python (Advanced)

## Hardware Technologies Technologies

- Arduino (Advanced)
- Raspberry Pi (Competent)

#### App Development

**♦** Android Studio (Advanced)

#### **Machine Learning**

TensorFlow(Competent)

#### **Image Recognition**

OpenCV (Advanced)
TensorFlow (Advanced)

#### **DataBase**

Google Firebase(Adept)

#### Game Development

LibGDX Engine(Advanced)
Unity(Adept)