EDUCATION

Stony Brook University

Major: Computer Science: Relevant Completed Courses: Data Structures, Multivariable Calculus, Linear Algebra, Discrete Maths, Programming Paradigms and Abstractions, Object-Oriented, Computer Architecture. Computational Theory

Expected Graduation: June 2023

GPA: 3.61

WORK EXPERIENCE

STI: Saif Tutorial Institute

- Stony Brook University Computer Science T.A.
 - Taught Students in CSE 101 paradigms in Data Structures, Libraries, Coding Style, Critical thinking, and Algorithms. Taught weekly labs, and held office hours.

July 2015-June 2018

- Full-Time summer Instructor for SAT I, II & A.P CS
 - 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 the website from scratch with the MERN Stack. User submissions saved to an Atlas cluster. This is my personal website with project examples and demos. MERN, JavaScript, HTML, CSS, Visual Studio
- OpenCV to Robot Arm
- Built a custom hand detection algorithm with the OpenCV library using a cloud source library (MQTT) to communicate with the Arduino. Java, Python
- Dynamic Website Capital One Summiteer
- https://github.com/walid101/ESTNews Main Built with Django and Pycharm this project was a challenge issued by Capital One for their prestigious software engineering summit. We were tasked with making a news website that continuously updates the most recent headlines with the NewsAPI. Django, Pycharm, Bootstrap, Python, NewsAPI
- MakeHarvard Hackathon (2020): Lead Programmer
- 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 (Advanced)

Back End Technologies

- Java (Advanced)
- Python (Advanced)
- C++ (Advanced)
- Haskell (Advanced)

Hardware Technologies

Arduino (Advanced)

App Development

Raspberry Pi (Competent)

Machine Learning

TensorFlow(Competent)
PaaS/IaaS Deployment

Image Recognition

OpenCV (Advanced)
TensorFlow (Advanced)

DataBase Technologies

Google Firebase (Adept)
Atlas/MongoDB (Advanced)
Diango (Web Dev + Backend)

Game Development

Android Studio (Advanced)Visual Studio Code(Advanced)

LibGDX Engine(Advanced)
Unity(Adept)