

# ARSH SINGH

☎ 516-419-7200 ✉ [as4274@cornell.edu](mailto:as4274@cornell.edu) [in linkedin.com/in/arshsingh5/](https://www.linkedin.com/in/arshsingh5/) [🌐 arshsingh.net/](https://arshsingh.net/)

## Education

### Cornell University

*Bachelor of Science in Computer Science, Dyson Business Minor for Engineers*

August 2024 – Present

*Ithaca, New York*

### Relevant Coursework

- \*Object-Oriented Programming and Data Structures
- \*Multivariable Calculus for Engineers
- \*Introduction to Machine Learning
- \*Trends in Modern Web Development

(\* = in progress)

## Experience

### Future Engineers Academy

*Founder, Head Instructor*

August 2023 – August 2024

*Hicksville, New York*

- Founded and led FE Academy, a youth organization focused on STEM education (501(c)(3) status pending).
- Designed and taught interactive STEM lessons to upper elementary and middle school students at no cost.
- Conducted three successful week-long summer sessions at a public library with high engagement.
- Managed social media presence and shared STEM-related content (@futureengineersacademy).

### Bethpage High School

*Student IT Helper*

June 2022 – August 2023

*Bethpage, New York*

- Volunteered for the IT department, assisting with technology setup and maintenance.
- Organized and configured new district devices including Chromebooks, SMART Boards, and desktop computers.
- Worked alongside graduate students for 25 hours/week during summers and occasionally throughout the school year.

### SnappyXO

*Teaching Assistant*

July 2022 – August 2022

*Stony Brook, New York*

- Volunteered as a teaching assistant for the 2022 CEWIT MTRC SnappyXO Robotics Camp under Dr. Anurag Purwar.
- Assisted with lessons on robotics, mechanical design, electronics, programming, and physics using SnappyXO kits, Arduino IDE, and MotionGen.

## Projects

### NFC Attendance System | Python, Java, DigitalOcean

December 2023

- Developed an attendance tracking system for a high school robotics team, using NFC stickers, a Java Servlet on DigitalOcean, and a Raspberry Pi sensor client with a TKinter UI in Python.
- Integrated with a Web-Scraping Discord Bot to relay attendance data and feature leaderboards to the team.

### Pulmonary Tuberculosis ANN Detection | Python, Tensorflow

December 2022

- Created a TensorFlow-based Python program to classify Pulmonary X-rays for early Tuberculosis detection with over 85% accuracy.
- Authored a research paper and received an Honorable Mention at the Long Island Science Congress.

## Technical Skills

**Languages:** Python, Java, C#, HTML/CSS

**Developer Tools:** Visual Studio Code, IntelliJ IDEA, OnShape

**Technologies:** Git, React, Firebase, Linux, Unity, Oracle Cloud, DigitalOcean, CAD

## Leadership / Extracurricular

### FIRST Robotics Competition

*Captain, Driver, CAD Lead*

September 2020 – May 2024

*Team 2869: The Regal Eagles*

- Qualified for the 2024 World Championships and ranked #19 in the international division.
- Led the team to win the Impact Award, Engineering Inspiration Award, and Robot Finalist in 2024.
- Mentored three junior-level robotics teams from Long Island.

### Varsity Tennis

*Captain, Singles Player*

September 2021 – June 2024

*Bethpage High School Varsity Boys Tennis*

- Captained the team and played as a top singles player.
- Provided private tennis lessons during the summer of 2024.

### SeaSweep

*Chief Technology Officer*

September 2023 – June 2024

*Virtual Enterprises International*

- Directed the technology department, overseeing web development, newsletters, and video editing.
- Competed in the International Competition at the Javits Center in New York City.