

# SAYAN CHAUDHRY

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## // EDUCATION

### **School of Computer Science, Carnegie Mellon University**

*Bachelor of Science*

Computer Science, May 2021

*QPA: 4.0 (Dean's List Fall 2017)*

*Relevant Coursework:*

- Principles of Imperative Computation\*
- Principles of Functional Programming\*
- Mathematical Foundations of Computer Science
- Calculus in Three Dimensions
- Matrices and Linear Transformations
- Principles of Microeconomics

## // SKILLS

*Programming/Scripting:*

Python • C/C++ • SML • SQL • HTML • CSS • JavaScript

*Technologies/Environments:*

Linux • Git • OpenCV • LaTeX

## // ACTIVITIES

### **ScottyLabs**

*Director of Finance*

February 2018 - present

### **TartanHacks**

*Student Organizer*

October 2017 – February 2018

### **CMU UNICEF**

*Education Co-Chair*

October 2017 - December 2017

### **Teknowledge**

*Curriculum Designer*

October 2017 - November 2017

## // WORK EXPERIENCE

### **Languages Technology Institute, Carnegie Mellon University**

*Research Assistant*, February 2018 - present

- Extracted tabular data from WWW pages to help build a new web-browsing modality for the blind as part of the SayHear project
- Wrote MySQL queries to train ML algorithms how to extract relevant information from parsed tables

### **Edutech Foundation**

*Head of Operations*, July 2015 - July 2017

- Initiated SheForSTEM campaign to inspire girls to pursue sciences in high school
- Created English speaking courses to help underprivileged children become job ready

### **Cluster Innovation Center, University of Delhi**

*Summer Intern*, June 2016

- Developed control systems for track robots using computer vision for object recognition and scene analysis using OpenCV

## // RESEARCH

### **Realizing a Microprocessor as a Particle Sensor**

*Participant*, CERN Beamline for Schools

### **Button and Hook Tacking Device and Method Thereof (Patent Pending)**

*Awardee*, Dr APJ Abdul Kalam IGNITE Award 2017 by National Innovation Foundation

### **Data Management Device to Enhance Cellular Connectivity in Rural Areas (Patent Pending)**

*Awardee*, Dr APJ Abdul Kalam IGNITE Award 2016 by National Innovation Foundation

### **Computation Model for Detection and Profiling of Antimicrobial Resistance in *N. gonorrhoeae***

*National Finalist*, Intel IRIS National Science Fair

## // SELECTED PROJECTS

### **ezxkcd** • PennApps Winter 2018

- Created a media recommendation algorithm using sentiment analysis that suggested xkcd comics by recognizing the user's current mood using OpenCV and Tensorflow with a 3-member team
- The project was among the top 30 hacks at the hackathon

### **Cows and Bulls** • 15-112 Term Project

- Developed a word game in Python using OpenCV and a k-NN classification algorithm for optical character recognition and sockets for a multiplayer mode
- Used pruning and decision trees to create an AI for the game

### **VideoLingo** • HackCMU 2017

- Created a desktop platform in Python that helps users learn new languages by using community translated YouTube closed captions with a 4-member team
- The project was named the 'Most Likely to be the Next Million Dollar Startup'

### **Bhasha Technologies** • BharatHacks 2017

- Developed an accessibility solution in Python with 4-member team to translate and dub the audio track of any YouTube video into Indian regional languages in real time
- The project won the first prize at the hackathon and is part of IBM's Global Entrepreneur network

## // HONORS AND EXPERIENCE

- *International Rank 1*, National Cyber Olympiad 2015 (held in 22 countries)
- *Honorable Mention*, NASA Ames Space Settlement Contest
- *Second Runners-Up*, Computer Society of India's Young Talent in Computer Programming
- *Student Organizer*, XINO 2016 - a statewide technology symposium with 300+ participants