

# 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 F17, S18)

*Relevant Coursework:*

- Parallel and Sequential Data Structures and Algorithms\*
- Great Ideas in Theoretical Computer Science\*
- Principles of Imperative Computation
- Principles of Functional Programming
- Calculus in Three Dimensions
- Principles of Microeconomics

## // SKILLS

*Programming/Scripting:*

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

*Technologies/Environments:*

Linux • Git • SQL • MongoDB • TensorFlow • OpenCV • REST

## // ACTIVITIES

### Mathematical Foundations of Computer Science

*Teaching Assistant*

August 2018 – present

### 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

### PreCog Research Lab, Indraprastha Institute of Information Technology

*Summer Research Intern*, May 2018 – July 2018

- Used TensorFlow and MLKit to identify and analyze dangerous selfies on social media as part of the #Killfie project under Prof. Ponnurangam Kumaraguru
- Developed an accompanying Android app to warn users taking dangerous selfies in real time

### Language Technologies Institute, Carnegie Mellon University

*Research Assistant*, February 2018 – May 2018

- 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

## // SELECTED PROJECTS

### No Duckling is Ugly • PennApps Fall 2018

- Developed a scalable IoT system to tackle the problem of bullying in schools by conducting sentiment analysis and voice model recognition using a RESTful API for CRUD operations
- The project won the Best Education Hack and the Best IoT Hack awards at the hackathon

### 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

### 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

## // 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

## // 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