

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 • SQL • HTML • CSS • JavaScript

Technologies/Environments:

Linux • TensorFlow • OpenCV

// 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

Languages Technology 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

// 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