

## EDUCATION

Degree	Institution	CGPA/Percentage	Year
B.Tech.	Indian Institute of Technology, Gandhinagar	6.53	2020 (Expected)
Class XII	D.A.V. Public School, Kota (C.B.S.E.)	92.4%	2016
Class X	D.A.V. Public School, Kota (C.B.S.E.)	10.00	2014

## EXPERIENCE

Google Summer of Code

2018

KDE Community

- Collaborated with my mentor to implement JavaScript extension support for Falkon, reducing the development time by *more than half*.
- Exposed C++ classes as *web extension inspired* JavaScript API using QML as a bridge.

## SIDE PROJECTS

Crusta Browser

github.com/crusta

Cross-platform desktop web-browser

- Developed cross-platform desktop web-browser with more than **5000 users** from over **120 countries**.
- Unique features like Split tabs, Cookie management, text to speech, custom themes.
- Tweaked UI on OSX using Objective C++ to support dark mode, accent color and make it feel native.

Truck

github.com/tarptaeya/truck

Programming language

- Implemented as *tree walking interpreter* using *hand-written* recursive descent parser.
- Supports Integer, String, Boolean, Arrays, Lambdas, Closures and User-Defined Modules.
- Featured on *Proglang Design* and *Product-Hunt* amongst top products of the day.

Post-Hub

github.com/tarptaeya/post-hub

Photo + GIF sharing social web-application

- Supports like, comment, follow, notification, search, user feed and explore.
- Featured on *BetaList*, which is a directory of hand-picked unique and new startups.
- Can handle about **200 req/second** on single 1GB droplet.

## OTHER PROJECTS

- FeedGram: News and feed reader application for iOS, built using React Native.
- Tic Tac Toe AI: Online game using Minimax with depth limited depth-first search to create AI modes (easy, medium and hard).
- NNKit: Authored pure python neural network library with API motivated from Keras.
- PDFReader: Developed PDF reader extension for Falkon using pdf.js.
- Crocodile: Crafted a Lightweight HTTP/1.1 WSGI compatible web server in pure python.
- Event App: Worked with members of the Design team to develop an android app for Amalthea'17, annual technical fest of college.
- Tweet analysis: Scraped tweets and developed backend to group them according to events, in a group of 5 as a part of Database course.
- Instrument to Instrument: Trained a multi-layer perceptron to extract musical notes, in a group of 4 as a part of Machine Learning course.
- XHTML to LaTeX: Transpiler for XHTML to LaTeX using Bison, done as a part of Compilers course.
- 16 Bit Bootloader: Bootloader in Assembly, in a group of 4 as a part of Operating System course.
- Maze Generator: Maze generation using Randomized Prims Algorithm, in a group of 3 as a part of DSA course.

## SKILLS

Languages	C++, Python, C#, Java, Kotlin, JavaScript, Swift, OCaml, HTML/CSS, PHP, SQL
Frameworks and Tools	Qt/QML, Django, Flask, PyTorch, Android, Cocoa, Node.js, Express.js, React.js, React Native, CMake, Ant, Git, Bash, Travis
Software	Inkscape, PhotoShop, Sketch, Adobe XD, Blender (Beginner), Defold Game Engine

## ACHIEVEMENTS

- ACM ICPC: Qualified for **3 regional sites**, one in first year and two in second year of college. 2016, 2017
- JEE Mains: Scored **306/360 (99.99 percentile)** out of 1.2 million candidates. 2016
- NSEP and NSEC: Awarded *Certificate of Merit* for being **National Top 1%** in both National Physics and Chemistry Olympiad. 2016
- KVPY: **Ranked 42**, recipient of *KVPY Fellowship* by Dept. of Science and Technology, Govt. of India. 2015
- IJSO: Selected amongst **top 35** students in India, to attend OCSC at Homi Bhabha Center for Science and Education. 2014
- NTSE: Recipient of *NTSE Scholarship*, organized by NCERT. 2012

## ACTIVITIES

- *Campus Ambassador* of HackerEarth, organized various competitive programming contests on the campus.
- Organized *"The Butler Did It"* event which has **over 100 participants**, as a member of the event team of Blithchron'17.
- Part of the Design team for Amalthea'16, *designed posters* to showcase the events and sponsors.