

# Mukul Hase

<https://mukulhase.com> | [mukulhase@gmail.com](mailto:mukulhase@gmail.com) | +1 (510) 988 6730

## EDUCATION

### IIIT HYDERABAD

BACHELOR'S IN COMPUTER SCIENCE  
& ENGINEERING

Grad June 2018 | Hyderabad, India  
CGPA: 8.34/10

### NARAYANA JUNIOR COLLEGE

Grad. May 2014 | Hyderabad, India  
Percentage: 93

### DELHI PUBLIC SCHOOL

Grad. May 2012 | Hyderabad, India  
CGPA: 10/10

## AWARDS

2017	1st Place	<u>NBO Hackathon</u>
2016	2nd Place	<u>MS Code.Fun.Do</u>
2018	Dean's List	IIIT 4th Year
2016	Dean's List	IIIT 2nd Year
2015	Dean's List	IIIT 1st Year

## SKILLS

### PROGRAMMING

Languages (Advanced):

Python • Javascript (& variants)

Languages (Proficient):

Java • C++ • Swift • Obj-C • Racket •

Rails • C • PHP • Assembly • Shell •

Matlab • CSS • Scheme

Familiar Technologies:

React • OpenCV • AngularJS • MySQL •

Postgres • jQuery • NumPy • Django •

Android • Cordova/Ionic • Git • Unreal

Engine • Chrome Extensions • PyQt •

PyPI • Socket Programming • Keras • iOS

• MeteorJS • React Native

## COURSEWORK

### UNDERGRADUATE

Computer Vision

Statistical Methods in AI

Data Structures

Complexity and Advanced Algorithms

Game Design and Engineering

Artificial Intelligence

Computer Networks

Operating Systems

Database Systems

Distributed System

Functional Programming

Principles of Information Security

## EXPERIENCE

### SOFTWARE DEVELOPER 2 AT MICROSOFT

June 2018 – Current | Redmond, WA

WHITEBOARD SHARING FEATURE IN MICROSOFT TEAMS

Developing UI/UX in their Desktop App. (React, GraphQL, Electron, Apollo)

END-TO-END DEVELOPMENT OF EDGE-BASED COMPUTER VISION MODELS  
FOR DOCUMENT CLEANUP, CROPPING AND CLASSIFICATION

• Created a parametric system to generate realistic synthetic images of documents. (Used for training and scoring) • Wrote various Python tools for data collection, filtering, processing datasets • Created a pipeline for data-collection and training on AML • Created different voting, annotation and analysis tools. • Ported desktop models to ONNX/CoreML/TFLite and implemented models on Native Android & iOS.

NATIVE MOBILE APP DEVELOPMENT (ANDROID AND IOS) IN OFFICE LENS

• Worked on the Camera stack • OfficeLens Re-architecture (Kotlin) • Wrote GPU Shaders (Metal & OpenGL ES) • Performance improvements on document deletion/update times (10x) • Created custom UI Animations.

### SWE INTERN AT FREEAGENT SOFTWARE (Bay Area startup)

May 2017 – July 2017 | Saratoga, CA

Worked with full-stack web technologies like React, GraphQL, Sequelize, Express, Apollo. • Was able to quickly ramp up on codebase and provide my first POC within a week. • Built a merge feature. In the process, I smoothly handled a complete codebase refactor when switching database key from incremental ID to UUIDv4 ID. • End to End creation of filtering system. Backend: Queries, APIs, Frontend: HOC, UI

## PROJECTS

### PYTHON LIBRARY FOR WHATSAPP WEB

WIDELY USED 1500+ STARS

[github] Capable of running bots to respond to Whatsapp messages while the phone is able to independently operate. Deployed on PyPI.

### TWINDER (IONIC APP) MICROSOFT CODE-FUN-DO WINNER

Localised and personalised tweet feed with sources and reference suggested based on tweet's context. Swipe left to discard, right to read more(Tinder).

### 3-SWEEP COMPUTER VISION DESKTOP APPLICATION.

[github] Desktop application which let's you drag-select objects(like in Photoshop), and manipulate your 2D image in 3D

### PEBBLE MESSENGER

SHAKE2TALK OVER FACEBOOK CHAT ON SMART WATCH

260 Users. MeteorJS Implementation involved handling multiple active facebook sessions on one AWS server and smartly fetching messages.

### FACEBOOK CHATBOT(KNOWN AS CLEVERFB)

CHROME EXTENSION TO SIMULATE USER TYPING

[github] Users can use this on their friends to take over their conversation. Deployed as a chrome extension on the chrome web-store. 55 weekly users on average(Made without use of messenger API).

MISC. PROJECTS • Feature-filled WebGL 3D Game • IIIT's event portal, Gives everyone a personalized calendar based on their "groups", integrated with college's LDAP authentication. • Ultimate TicTacToe AI Solver • File Downloading Server(TCP/UDP) • Shell in C