# **RAGHAV PURI**

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## **Objective**

To obtain a Software Engineering position applying technology, programming, and creative problem-solving skills to achieve customer utilization and profitability.

### **Education**

## **Master of Science in Computer Science**

May 2021

The University of Texas at Dallas, Richardson, USA

## **Bachelor of Technology in Electronics & Communication Engineering**

May 2019 GPA: 3.8/4.0

Guru Gobind Singh Indraprastha University (GGSIPU), Delhi, INDIA

#### **Technical Skills**

C++, Java, Python, Android Studio, Computer Vision, SQL, HTML, CSS

### **Work Experience**

### Algorithms Research Intern | Massachusetts Institute of Technology (MIT)

Jun 2020 – Present

- Responsible for Mapping 128 Algorithmic Groups to their corresponding industrial applications to analyze which algorithmic advances are in use
- Examining which algorithms are built into top 10 programming languages and their most used libraries
- Conducting an in-depth analysis to draw a comparison between theoretical and practical usage of algorithms over the years using **Python**
- Determining how important are algorithmic groups per their usage on opensource Projects and Research Papers

### Research Assistant | University of Texas at Dallas

Nov 2019 - Jun 2020

- Responsible for Developing & Testing an Android App that draws bounding box and detects 4 ML Parameters via Face Detection using **Java**, **TensorFlow**, **XML**
- Integrated **Firebase** with app to upload 6 different photos of different views of human head on the Server for further ML Classification & Processing
- The app is internally used by doctors for diagnosis of a disease called Craniosynostosis

### Google Summer of Code Intern | AOSSIE, Delhi, India

Apr 2018- Aug 2018

- Developed Starcross iOS app that identifies Live locations of approx. 250 Stars, Planets & Constellations using **Objective-C**, C++, and GL
- The app uses the database of coordinates provided by NASA to determine their exact locations, collaborated with device's GPS
- Created 7 separate UI/UX compatible with various iPhone versions (iPhone 6S to iPhone X)

# **Relevant Leadership Experience**

### Mentor | Google Summer of Code | AOSSIE, Delhi, India

Apr 2019- Aug 2019

- Mentored a student involved in the Android Project that identifies live locations of Heavenly bodies
- Assisted and Guided towards the completion of the project by suggesting changes in code & development cycle and merging it in the main repository

### Organization Administrator (Highest Rank) | Google Code-In | AOSSIE

Sep 2018- Feb 2019

- Successfully led the organization during the execution of the Program
- Mentored 41 students and created 8 tasks for the participants

### Co-Founder of a Startup "KhareedTo" | Delhi, India

Jan 2016- Aug 2017

- Co-Founded a startup that provided Engineering Refurbished Products like Drafters, Calculators and Lab Coats at a substantial price to the students
- Responsible for Developing a website for students to order the products and delivering those items within 1 business day

## **Selected Projects**

- Color & Object Detection Android App for visually impaired people (Java, XML, Android, TensorFlow)
- Handwritten Digit Classification (Python, OpenCV, Jupytr Notebook)
- Car and Pedestrian Detection in Videos (Python, OpenCV, Jupytr Notebook)
- Ball Tracking (Python, Computer Vision, Jupytr Notebook, Machine Learning)

#### **Publications and Hackathons**

- Selected for HackMIT-18 at Massachusetts Institute of Technology as one of approx. 10 students in India.
  Developed a Chat Bot in Messenger that could be used in Disaster situations like Flood/Earthquake with feature of One-Tap Calling to emergency services like Ambulance, Police
- Performance Comparison of Object Detection algorithms with different Feature Extractors published at IEEE Xplore
- Emotion Detection using Python presented for IEEE Xplore
- Secured **7th Position** among **1600+ teams** at Rajasthan Hackathon 4.0, 2018

# **Honors, Activities & Clubs**

- First Electronics Major Student to crack Google Summer of Code at college
- One of approx. 10 students in India to get selected for Hackathon at Massachusetts Institute of Technology
- Bass-I (Vocal) at UT Dallas Choir Group
- Technical & Publicity Executive at Association for Computing Machinery (ACM) at GGSIPU
- Core Team Member, Entrepreneurship & Development Cell (EDC) at GGSIPU