

□737-333-0192 | ☑ kushkdesai@utexas.edu | 🏕 kdesai2018.github.io | 🖸 kdesai2018 | 🛅 kushkdesai

Education

## The University of Texas at Austin

August 2018 - December 2021

B.S. IN ELECTRICAL AND COMPUTER ENGINEERING (DATA SCIENCE AND INFORMATION PROCESSING)

GPA: 3.60/4.0

Operating Systems, Algorithms and Data Structures, Probability, Linear Algebra, Relevant classes

Software Implementation and Design (Honors), Data Science Principles, Digital Image Processing

Languages Python, Java, C, C++, Javascript

**Technologies** Robot Operating System, AWS, Pytorch, Tensorflow, JavaFX, Flask, OpenCV, Git

Work Experience

## **BP Integrated Supply and Trading**

Summer 2020

SOFTWARE ENGINEERING INTERN

Virtual

**Socially Intelligent Machines Lab** 

September 2018 - Present

RESEARCH INTERN University of Texas at Austin Researching novel audio-based learning and object recognition algorithms under Dr. Andrea Thomaz

Used Python, C++, ROS, AWS and Javascript to design Human Robot Interaction experiments

**Freetail Hackers** January 2020 - Present

LOGISTICS DIRECTOR

• Handled logistics for SummerHacks 2020, a virtual hackathon with 300+ attendees from all over the world

• Created the ultimate-hackathon-starter-guide on Github to help educate first-time hackathon competitors

**Projects** 

## **BEVO - Blind Environment Visualization Objects**

**TAMUHack** 

BEST USE OF GOOGLE CLOUD, BEST ACCESSIBILITY HACK

GITHUB.COM/KDESAI2018/BEVO

2020

• Used Tensorflow, Google Cloud, Python and OpenCV to build a palm and object recognition pipeline to help visually impaired individuals locate objects using audio cues

## **ROS Object Recognition**

Open Source

GITHUB.COM/KDESAI2018/ROS-OBJECT-RECOGNITION

• Built and finteuned an open source, Robot Operating System based real-time object detection system using Python, PyTorch, COCO and OpenCV

**Drowsy Driver UT Makeathon** 

1ST OVERALL, BEST IN WORKPLACE SAFETY

2019

GITHUB.COM/KDESAI2018/DROWSY-DRIVER

• Used OpenCV, Python and Arduino to create an eye and grip tracking system to determine driver alertness

• Contributed this project to the open-source face recognition project with 34.2 stars on Github

**HackMIT** 

DEVPOST.COM/SOFTWARE/TRACER

2019

**BetterKev** 

Built a game hosted on AWS using Javascript and PIXI to introduce programmers to the debugging process

DEVPOST.COM/SOFTWARE/BETTERKEY

2019

**TAMUHack** 

• Created a **genetic algorithm** in **Java** to create a keyboard layout **customized for the user** that minimizes typo collision by 60% (versus DVORAK) and increases typing speed by 10% (versus QWERTY)

KUSH DESAL · RESUME