Kush **Desai**

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Education

The University of Texas at Austin *August 2018 - December 2021*
B.S. in Electrical and Computer Engineering (Data Science and Information Processing) *GPA: 3.53/4.0*

Relevant classes	Operating Systems, Algorithms and Data Structures, Probability, Linear Algebra, 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 **gaze tracking, 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 *2020*
GITHUB.COM/KDESAI2018/BEVO
- 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 *2019*
- 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

Tracer *HackMIT*
DEVPOST.COM/SOFTWARE/TRACER *2019*
- Built a game hosted on **AWS** using **Javascript** and **PIXI** to introduce programmers to the debugging process

BetterKey *TAMUHack*
DEVPOST.COM/SOFTWARE/BETTERKEY *2019*
- 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)