

# NIRBHAY SINGH NARANG

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## EDUCATION

### Cornell University

BA Computer Science *GPA: 3.85*

Ithaca, NY

Aug 2021 - May 2025

## PROFESSIONAL EXPERIENCE

### Software Engineering Intern

*Software Engineering Intern*

Remote

May 2020 - July 2020

- Utilized Python, TensorFlow APIs to automate parsing of handwritten shipping manifestos with 91% accuracy. Built CV models to tag and classify promotions in print ads for Reckitt Benckiser to optimize future promotions with 86% accuracy. Consulted regularly with customers and team leads on project status, proposals and technical issues.

### State Government of Rajasthan

*Software Engineer*

Jaipur, India

Dec 2019 - April 2020

- Wrote, designed, tested, and deployed iOS application with a Firebase backend and user authentication to register organ donors for the state. Verified operational and UX integrity of app for future release. Developed user interfaces per client-provided parameters.

### InvenTree

*Chief Technology Officer*

Delhi, India

January 2020 - January 2021

- Co-founded grassroots startup designed to be India's first digital tree inventory. Single-handedly wrote, tested, and deployed iOS application with 10K+ registered users, 70K+ trees added to the database in 3 countries. Integrated Firebase SDK, Google Maps SDK to build app with custom authentication and a real-time interactive map view. Implemented a miniature social network feature allowing users to host and join tree plantation drives.

## SKILLS

Programming Languages and Frameworks: Python, C++, Java, Swift, Dart/Flutter, Flask

## PROJECTS

### Safely.ai Python, Swift, Tensorflow

<https://safely-ai.netlify.app/>

Using Python, a YOLO Object Detection Model, and a COCO annotator, built a Real-Time Heavy-Vehicle Detection with integrated ANPR capabilities. Deployed as a Streamlit web-app. Using TensorFlow for Swift, developed a Real-Time Road Pothole Detection based on a YOLO model. 'RoadDetect' app uploaded to App Store.

### Garbify Swift, CreateML

<https://garbify.netlify.app/>

Using Swift and CreateML, built an Object Detection and Classification application for detecting and classifying types of trash and suggesting suitable recycling methods for iOS.

### FindMyParty Flask, Swift, Firebase

iOS App to help users host & find parties based on geographical location, backend built with Flask with 10+ routes, front-end built in Swift. 2nd in Best Overall Category at the Cornell AppDev HackChallenge.

### SeeSpeech Python

Using Python and supporting libraries, built an NLP-based Speech/Text to Indian Sign Language Translator. The translator can take speech/text/handwriting as input and will then output a .mp4 file containing the ISL translation.

### Hidden Biases Swift

Developed a native iOS application in Swift to help users identify inherent biases they hold based on the Harvard Implicit Association Test. Uploaded on App Store.

## ORGANISATIONS

### Computers For Convicts

Computers For Convicts is a social initiative I co-founded which is aimed towards increasing accessibility towards digital education in prisons.

### Cornell Design and Tech Initiative

Software Engineer at an on-campus project team. Working on a Flutter- based mobile app to organise scavenger hunts on campus.