# Preetham Kesineni

University of California Santa Barbara - Class of 2021



## **EDUCATION**

**University of California Santa Barbara** — Graduating: Dec 2020 Computer Science – Bachelors of Science

## **EXPERIENCE**

**Research Assistant, Meta Lab** — September 2019 - February 2020

- Developed research tool utilized to detect user reaction to small visual stimuli to measure correlation
- Light Development of ML research tool for usage to collect user data on visual stimuli to analyze The Big Five of Personality among test subjects
- Relevant languages/frameworks: Python3, Psychopy

Junior Developer, ThankQ Net —

September 2016 - March 2017

- Ported mobile application from Flash to native while squashing 80% of visual bugs in legacy application
- Built application to specifications of the UX team with guidance from a senior developer
- Relevant languages/frameworks: Swift, Storyboard, Ionic, Flash

## PROGRAMMING PROJECTS

Pixel Swap Game -

August 2018 - April 2018

- iOS Sprite kit based game involving a character that must switch between two sides (top and bottom) of the screen in order to avoid obstacles
- Utilized Xcode built in physics engine in order to simulate gravity on one side and inverted gravity on the other side
- Relevant languages/frameworks: Swift, Spritekit, Gameplaykit

**Budget Visualizer -**

March 2020 - May 2020

- NextJs web program structured to measure and analyze users' monthly budget spending allowing the user to set and track goals to improve their financial budgeting skills.
- Formed in a team oriented atmosphere utilizing principles of version control, divide and conquer programming, and Agile software development
- Relevant Languages/Frameworks: NextJs, javascript, Heroku, Autho

Weatherly iOS -

March 2018 - April 2018

- Integrated with weather data from Wundergrounds weather API and displays a ten day forecast in a user friendly view
- Reformats data using JSON Decoder to generate UITableView in app
- Relevant Languages/Frameworks: Wunderground Weather API, Swift, StoryBoard

## Pi-Spy Camera -

June 2017 - July 2017

- Door-mountable security camera that uses motion detection to monitor activity and notify user; runs on Raspberry Pi
- Motion detection algorithm detects differences in low resolution images captured in five second intervals and alarms on significant changes in pixel counts
- Relevant languages/frameworks: Twilio, Python 3, Bash

## Portal AR iOS -

January 2018-February 2018

- Created a virtual door to a digitally rendered room viewable through the iPhone Camera
- Maps the floor for flat surfaces with ARkit and produces an AR room model in front of the user
- Relevant languages/frameworks: ARkit, Swift, Storyboard

#### **SKILLS**

# Classes(Completed)

- 130A-B: Data Structure and Algorithms
- 165B: Machine Learning
- 178: Digital Imaging
- 165A: Artificial Intelligence
- 154: Computer Architecture

# Classes(In Progress)

• 170: Operating Systems

# Language

- C++
- Python3
- Swift
- NextJs
- Java
- Objective-C
- NodeJs
- NextJs

## Frameworks

- Tensorflow
- PsychoPy
- ARKit
- Matlab
- Bootstrap
- Ionic

#### Tools

- Git
- Xcode
- Unity
- Heroku
- Autho
- Sublime
- Visual Studio