# **DEVANSH KUKREJA**

Algorithms, Mobile Development, & Design

*Website* devanshk.xyz

#### Contact

dkukreja@andrew.cmu.edu +1 425 985 4874



## **EDUCATION**

# CARNEGIE MELLON UNIVERSITY

GPA: 3.63

## BS, COMPUTER SCIENCE & INFORMATION SYSTEMS: May 2019

· Doan's Lie

## TA for Mobile and IoT Computing

- · Graduate and Upperclassmen level course
- · Delivered lectures, hosted office hours, and graded homework

#### Relevant Coursework:

- Principles of Imperative Computation Spring 2016
- · Concepts of Mathematics Summer 2016
- Fundamentals of Computer Science Fall 2015



# **RELEVANT PROJECTS**

#### **PULSE**

#### Multiplayer Audio-Based Game that accepts any song as input

- · Won 2nd Overall at 15-112 Term Project Showcase
- Programmed algorithm to detect beats and their energy using data structures for efficient computation
- Implemented Fast Fourier Transform to create equalizer

## **AFIS**

## **Automated Fingerprint Identification System**

- 1st in Senior Division at Washington State Science Fair & appeared in King County AFIS magazine
- Programmed image analysis algorithms to detect minutiae points in given prints and compare them for similarity

## **AWARE**

## **Detect Motion Gestures and Customize Reactions**

- Developed Android app available in the Play Store: https://goo.gl/Eqm3iM
- Designed algorithms to detect hand waves, shakes, being pulled out of pocket, and being thrown into the air based on sensor data

## **PRANTLS**

## Mock Redesign for a local bakery

- · Website is live and viewable online: prantlsbakery.xyz
- Designed wireframes and developed from scratch with HTML, CSS, and lavascript
- Developed without using any CSS frameworks

## **DUCO**

## Tinder for Art Museums

- · Built at the Carnegie Museum Of Art's data hackathon
- Developed Android app that processes ,json dataset of artwork and implements a card-swipe based UI
- · Developed backend algorithm to customize artwork suggested to user

## **SOUNDHOP**

## Synchronized Music Across Devices

Finalist at AngelHack Seattle
 Developed Android app that links with Firebase to play and pause
 music simultaneously across devices running the app



## WORK EXPERIENCE

## STEAM FOR KIDS

Co-Founder, Teacher, and Designer - Summer 2015

- Taught basic programming algorithms and Scratch to elementary school students
- · Coordinated logistics for transport and supplies
- · Designed logo and PR material

## **AEROJET ROCKETDYNE**

### Engine Test Intern - Spring 2015

- · Planned test operations for a liquid-fueled rocket engine
- · Enacted cold-fire test to determine valve resistance
- · Conducted hot-fire test to measure actual thrust
- Designed logo for internship team

#### **VOICEBOX TECHNOLOGIES**

#### Mobile Development Intern - Summer 2014

- Integrated the voice recognition company's demo app with an unsupported SDK
- · Started from scratch; learned Android development



## **CODING TECHNOLOGIES**

EXPERIENCED	,			C#	Firebase
PROFICIENT	HTML	CSS		Javascript	
TROTICIENT	R	Lua		C0	C



# HARDWARE EXPERIENCE

Circuits	<b>• • •</b>
Arduino	<ul><li></li></ul>
Raspberry Pi	<ul><li>•</li></ul>
Spark Core	<b>©</b>



## **DESIGN SKILLS**

EXPERIENCED	Photoshop	Illustr	ator	InDesign	
PROFICIENT	TinkerCad	Inventor	3dsMax	Sketch	



## PRE-COLLEGE HONORS

Eagle Scout Associate Student Body President National Honor Society President



# **HOBBIES AND ACTIVITIES**



Dance Team



Robotics Club



Cooking



Working Out

