# DEVANSH KUKREJA

Algorithms, Mobile Development, & Design

Website devanshk.xyz

#### Contact

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# 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

#### PRANAAM INDIA

Designer - Spring 2015

· Designed logo, banners, menu cards, and schedule for banquet hall

#### **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



# **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

#### **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

# **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

#### **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



# **EDUCATION**

#### CARNEGIE MELLON UNIVERSITY

GPA: 3.63

#### BS, INFORMATION SYSTEMS: May 2019

· Dean's List

#### TA for Mobile and IoT Computing

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

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



#### **CODING TECHNOLOGIES**

EXPERIENCED	Python	Android	Java	C#	Firebase
PROFICIENT	HTML Lua	CSS (	Ja <sup>v</sup>	vascrip	ot R Ember



# HARDWARE EXPERIENCE

Circuits	•	•	•	•
Arduino	<b>(</b>	•	<b>()</b>	
Spark Core	<b>(</b>	<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**



