

DEVANSH KUKREJA

Algorithms, Mobile Development, & Design

Website
devanshk.xyz

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EDUCATION

CARNEGIE MELLON UNIVERSITY GPA: 3.66

BS, COMPUTER SCIENCE & 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

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 Javascript
- 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 | Python | Android | Java | C# | Firebase |
| | HTML | | CSS | | Javascript |
| PROFICIENT | R | Lua | C0 | | C |



HARDWARE EXPERIENCE

| | | | |
|--------------|---|---|---|
| Circuits | ○ | ○ | ○ |
| Arduino | ○ | ○ | |
| Raspberry Pi | ○ | ○ | |
| Spark Core | ○ | | |



DESIGN SKILLS

| | | | |
|-------------|-----------|-------------|----------|
| EXPERIENCED | Photoshop | Illustrator | 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 |
| Competitive Smash | |