

Anand Dukkupati

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Education

University of Michigan, Bachelor of Science in Computer Science, GPA: 3.7/4.0

Sep. 2017 - April 2021

- Data Structures and Algorithms (EECS 281)
- Web Systems (EECS 485)*
- Computer Organization and Design (EECS 370)
- Theory of Computation (EECS 376)

*currently enrolled

Skills

- Languages: C++, Java, XML, Python
- Web: HTML, CSS, SQL*, Javascript*, REST APIs*
- Languages: English, Spanish (intermediate)

*currently learning

Projects

Animation Maker

July 2018 - Present

<https://play.google.com/store/apps/details?id=com.arduk.animationcreator>

- Developed an Android Application available on the Google Play store for drawing traditional frame-by-frame animation
- Designed tools and features such as drawing, making undos/redos, and “onion-skinning”
- Optimized app performance for new and old Android devices
- Debugged application based on user feedback
- Continuing to add new features and polish UI
- Accumulated **1000+ downloads** on the Play Store

Pairing Heaps

May 2018

- Implemented a pairing heap priority queue from scratch in C++ using two research papers
- Implemented a binary heap priority queue and a sorted array priority queue from scratch in C++

Traveling Salesperson Problem and Minimum Spanning Tree

May 2018 - June 2018

- Implemented a brute-force algorithm to solve the Traveling Salesman Problem (TSP)
- Implemented a Branch and Bound algorithm to solve the Traveling Salesman Problem (TSP)
- Implemented the Prim and Kruskal algorithms to efficiently find a minimum spanning tree (MST)

Connect 4

Nov. 2017 - Dec. 2017

- Collaborated in a group of four to create a Connect 4 game
- Developed and tested backend in C++
- Designed colorful GUI with animations in OpenGL

Volunteering

Wildcat Singers

Sep. 2015 - May 2017

- Performed in an ensemble of 22 students at local farm shows, retirement homes
- Christmas caroled door-to-door in local neighborhoods

Operation Wildcat

- Organized books, toys, clothing and household appliances for donation to the community