

ABEL THEODROS

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EDUCATION

University of California, Riverside
B.S. in Computer Science

intended grad: June 2021
GPA 3.14/4.0

Related Coursework

Data Structures and Algorithms, Discrete Structures, Machine Organization and Assembly Language, Linear Algebra, Multi-variable Calculus.

TECHNICAL SKILLS

Software	Solidworks
Programming	C++, Python, Swift, HTML
Applications	XCode, Visual Studio Code, Adobe Premiere Pro, Final Cut Pro

PROJECTS

Unmanned Aerial Vehicle (UAV) Project, IEEE, UC Riverside *January 2019 - Present*

- Computer Science Division, Pathfinding Algorithms
 - Redesigned an algorithm in C++ that calculates the UAV's current location and height, then compares it with up to 50 points determine if it is close to a boundary line or obstacle
 - Collaborating with three engineers to verify possible points of collisions, combine obstacles if they share the same space, normalize height when the plane rises and falls by coding special classes in both C++ and Python
- Unmanned Ground Vehicle (UGV) Division, Design and Research
 - Designed and constructing an automated unmanned ground vehicle with five engineers that is to be dropped mid-air from 200 feet in the air via a fixed-wing autonomous aircraft, then drive to a designated location once reaching the ground
 - Solved possible damage to the payload after landing by designing and constructing a suspension mechanism to redist

Pullup, Hackathon Project, UC Riverside

Fall 2019

- Developed an iOS app in under fourteen hours using Swift that displays available parking spots and garages in high-traffic areas, also allowing users to offer their private parking spaces for rent
- Incorporated MapKit and UIKit to display interactive maps to search for and pin available lots. Each location pin in demo contains description of address, average hourly rate, and hours available

PROFESSIONAL AFFILIATIONS AND INVOLVEMENT

Member, Institute of Electrical and Electronics Engineers (**IEEE**), UCR

January 2019 - Present

Member, Association for Computing Machinery (**ACM**), UCR

August 2019 - Present

Member, Cybersecurity at UCR, UCR

August 2019 - Present