

SHOVAN SHAKYA

BRINGING IDEAS TO LIFE

EDUCATION

UNIVERSITY OF SOUTH FLORIDA

B.S Electrical & Electronics Engineering, Minor in Studio Art

2021 – 2025, GPA: 3.55

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momoisgoodforhealth.github.io

SKILLS

OpenCV, ROS, Git, Flask
Siemens PLC, Labview
Unity, Blender
Adobe Creative Suite

Solidworks Electric
Android Studio, Firebase
FL Studio, ProTools,
Dolby Atmos

Programming Languages:
Kotlin, Python, Javascript, C,
C++, C#, Verilog, VHDL

EXPERIENCE

Monterey Bay Aquarium Research Institute, Computer Vision Intern

June 2023 – Present

- Developing realtime distance and size estimation tools from stereo cameras for ROV using OpenCV.

Universal Creative Orlando, Research & Development Engineering Intern

September 2022 – December 2022

- Developed Unity, C#, Siemens PLC applications for automation, testing and debugging.
- Developed website for file handling using Flask. Initiated and developed BCI and Spatial Audio applications with Emotiv, Matplotlib, Unity, Dolby Atmos and WWise.
- Deployed a project involving a moving prop using stepper motors and Arduino.

Rehabilitation Robotics and Power Systems Lab, Research Assistant

May 2022 – Present

- Developing driving simulation environment using Unity, controlling Motek motion base.
- Integrating and exploring RPi3, cameras and power for Computer Vision project.
- Configured TCP communication between cRIOs using LabView. Integrated VHDL on cRIO FPGA. Verified and tested project involving calculating impedance using Oscilloscope, TI C2000, RPi4 Microcontrollers and Matlab.

Student Unmanned Aerial Systems + BMES Robotics, Software Lead

January 2022 – Present

- Assembled a robot that follows a dark tape using IR sensors, object avoidance using Ultrasonic sensors.
- Developing webserver for displaying info, computer vision for raspberry pi in drone.
- Programmed robot for autonomous victory in Vex Robotics State Championship.

USF FSAE + NASA Student Launch, Electrical Team Member

October 2021 – Present

- Developed Schematic design for engine harness along with testing gauges.
- Developed a 6 capacity battery box for storing and charging during competition.
- Used Arduino and ROS in Nvidia Jetson to connect with LoRA module for data transmission for NSL Rocket and ground station.
- Soldering, wiring, welding batteries & components for IEEE Electrathon electric car.

KHEL APP, Founder/Android Developer

March 2020 – June 2021

- Learnt app development & developed start up app idea using Kotlin, Firebase.
- Coordinated with team of an artist and marketing. Link: <https://bit.ly/39m5Abc>

AWARDS

USF Hackathon Hackabulls 2022 – Solo Winner Funniest Hack (Javascript, Snap AR)

VEXU Robotics Florida State Championship 2022 – Winning Team

USF GAME DEV CLUB GAMEJAM 2021 – Second Placed Team (Unity, Blender)

Tampa Bay Electrathon 2021 – 2nd Placed Team

Professional

Projects