

Tessa Ann Josy

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EDUCATION

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Bachelor of Technology in Electronics and Communication Engineering

College: Government Engineering College Thrissur, Kerala, India (2020 - 2024)

Thrissur, Kerala

CGPA: 8.3

PROFESSIONAL EXPERIENCE

PAPER PRESENTATION for IEEE Conference

June 2023

- Presented a paper titled "Teaching Indian Classical Music Using Web-Based Interactive Platform And Real-Time Audio Analysis" at the *International Conference on Acoustics, Speech and Signal Processing (IEEE)* 2023
- Constructed the paper to establish the function of digital signal processing in scripting fundamental musical notes

CREATIVE HEAD at TinkerHub (Technical Club) College Chapter

January 2022 - May 2023

- Essayed the pivotal role of upskilling new members of the design team which in turn improved the quality of curation
- Familiarised peers with Figma software through mentoring sessions

HACKATHON ORGANISER at IEEE Computer Society-TinkerHub: Hack@Arch

2022- 2023

- Spearheading the design and media team of Hack@Arch, an international event with registrations of well over 500

PROJECTS

SENSORIUM

March 2023- present

- Proposes a novel project for the visually impaired using a Microsoft Kinect sensor to detect obstacles and a glove with haptic vibrators for object recognition
- Primary application of this project includes depth-based interaction and real-time visualization of depth data

COMPUTER VISION AIDED COLOUR LOCATING ROBOT

August 2023

- Designed a robot to utilize computer vision techniques to detect the specified colour and then deduce its coordinates in the robot's reference frame while deploying colour segmentation and feature extraction techniques

AUTONOMOUS BAJA (ALL-TERRAIN-VEHICLE): SAE (*Society for Automotive Engineers*)

Oct 2023- Present

- Researching and structuring topics aligned with Robot Operating System (ROS), Matlab in the autonomous navigation domain

ACHIEVEMENTS

- Carolyn Leighton Scholar 21'**
- National Finalist-** eYantra Innovation Competition hosted by **IIT Bombay** (6th position)
- Past Member of **Toastmasters International Club**
- First Prize-** Graphics Design event conducted by the Graffiti Club GECT
- Second Prize-** A presentation conducted by **IEEE**
- Finalist-** Sustainability Hackathon Challenge 2023
- Third Prize-** Project Expo competition, Summer Startup Festival '22
- Third Prize-** Eloquence, a Presentation competition by **IEEE ComSoc Kerala Chapter**
- Hackathon Participated-** Hack K-State 2021, Digital EduHack South Asia 2021, Melbourne Hack 2021, **Build-A-Thon** organised by Gtech

SKILLS

Technical: Graphic designing, Verilog, C, C++, HTML, CSS, Python, OpenCV(beginner), ROS, Linux Operating System (OS), Arduino, Embedded C

Others: Leadership, Orator, Presentation Skills, Documentation, Drawing, Writer, Attention-to-detail

Courses: ROS Ultimate Guide for Beginners with **TurtleBot3** and Robot, The Joy of Computing using **Python**