

PRITHVIRAJ KADIYALA

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EXPERIENCE

Software Developer, KISS Institute for Practical Robotics

Feb 2019 - Present

- Developed and Deployed a 3D-Simulator based on a robot curriculum for 100% virtual access to students.
- Collaborated to implement 3D-Simulator hosted on Amazon AWS to administer computing power to each user.
- Analyzed and improved our company homepage by improving scripting thereby improving load times by 10%.
- Led the development, build and execution of a new Controller named "Wombat" which has increased efficiency by 100%, Operating speed by 400% with the help of newer, better and cheaper components.
- Introduced AI into Robotics for Elementary and Mid-School students.(ML, AI, Image Recognition, OpenCV).
- Developed software update patches to address bugs and better functionality.
- Develop and Improve libraries in Linux based OS for more functionality and modular use of the robot infrastructure.
- Implemented new features: Over-the-Air Updates, More libraries, Better Wi-Fi connectivity and Easier SD card swaps.
- Technologies Used: TypeScript, Reactjs, Nodejs, Threejs, Ammojs, C++, Python, Qt, HTML, OOPs

Research Graduate, University of Oklahoma

Aug 2016 - Jan 2019

- Designed and deployed a website while leading a team of 5 while improving the performance over existing application.
- Implemented multi-user functionality allowing for data exchange times between the animal scientists by 100%.
- Implemented a search functionality with a radio checkbox to minimize the search radius to reduce load time by 75%.
- Website hosted on remote Linux server using Apache framework to accommodate Flask applications.
- Implemented Python for redirection and handling server requests between JavaScript and RestAPIs in JSON format.
- Implemented RestAPIs for asynchronous server requests allowing multi-user functionality to function better.
- Responsible for translating the Scientists' requirements into Real-world features.
- Enhanced user experience by fine-tuning stored procedures & SQL queries for efficient data retrieval for 1M records.
- Technologies Used: Python, JavaScript, AJAX, REST-API, MySQL, Flask

PROJECTS

Gesture Controlled Music Player(Android Studio, Java)

- As a software Engineer my task was to achieve communication between the gesture recognition and the Music player.
- The application used hand gestures to control volume up/down and next/previous song.

Android App Developer Intern(Android Studio, Java)

- Developed example applications for Android Market using Java, Android Studio
- Implement the basics of Object-oriented programming and Data Structures.
- Learnt about the agile environment helping me to version, share and track the progress of the project.

Bluetooth Speaker(ANSYS, AutoCAD)

- 3-D Modelled and Fabricated a bluetooth Speaker as a part of College project.
- Understood the importance of testing and performing analysis on the structural integrity of the device.
- Got a hands-on experience in designing multiple iterations of PCB to get one that was approved by the whole team.

EDUCATION

M.S, Electrical and Computer Engineering

Aug 2016 - Dec 2018

University of Oklahoma

B.Sc., Electronics and Communication Engineering

Aug 2012 - May 2016

B.V.Bhoomaraddi College of Engineering and Technology

SKILLS

Development Environments: VSCode, Eclipse, MATLAB, Linux, , Google Colab

Programming Languages: Python, C++, JavaScript, TypeScript, MySQL, AJAX, TensorFlow, , HTML, CSS, JSON, AWS