

KESHIKA TANK

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EDUCATION

University of Southern California (Los Angeles, CA)
Master of Science in Computer Science
Courses: Analysis of Algorithms, Software Engineering

Aug 2021-May 2023
GPA 3.85

Vellore Institute of Technology (Vellore India)
Bachelor of Technology in Computer Science
Ranked within top 3 in CS department

July 2016-June 2020
GPA 9.58

Courses: Data Structures and Algorithms, Operating Systems, Database, Machine Learning, Networks and Communications

SKILLS

Languages and Frameworks: Java, C++, Python, JavaScript, JQuery, React.js, Redux, Vue.js, Vuex, HTML5, CSS, SQL

Tools: DialogFlow, AWS, GCP, Git, JIRA, Cordova, Visual Studio, RASA AI

Methodologies: Scrum, Agile

PROFESSIONAL EXPERIENCE

Dure Technologies (Mumbai, India)
Associate Software Engineer

June 2020-June 2021

- Primary contributor in the development of organization's key asset "iMonitor" which empowers countries and donors to collect information from end users about a public health program. This solution is used in more than 35 countries for different use cases like HIV, TB, Malaria and other public health programs.
- Engineered RASA AI based voice assistant which was trained on millions of keywords for TB use case for The Philippines (DOH) and will be used by 40,000+ health workers and several thousands of patients.
- Migrated application framework from JQuery to React & Redux, also followed best practices of using state management which led to 15% decrease in response time and 40% decrease in application size.
- Upgraded application features to make them dynamic and fetch data and information over APIs, reducing the person hours efforts spent in change management by 50%.
- Architected and coded an adherence module including data visualization and reminder feature, making the application feature rich which improved user engagement by 30%.
- Worked on major SDLC phases such as development, testing and revamping of 10+ applications following scrum methodology.

Dure Technologies (Mumbai, India)
Software Intern

Dec 2019-June 2020

- Developed an AI image classifier using OpenCV to classify images into types and also filter out irrelevant files uploaded by users reducing the person hours efforts spent to clean data by 50%.
- Prototyped an interactive blood bank portal with Wordpress and SQL with an essential module to search hospitals, blood banks and clinics near user and visualize data on map utilizing Leaflet, GeoJSON and QGIS.

Amazon (Chennai, India)
Amazon Campus Mentorship Intern

Feb 2019-July 2019

- Developed a model to extract text from Kindle book cover image and classify text as title or author using AWS and Python.
- Enhanced above model with sentiment analysis to decide genre and fetching author's Wikipedia for meta data.

PROJECTS

- **Video Surveillance System : Background Subtraction & Alert System:** Devised a robust approach of Background Subtraction to detect motion enhanced with Adaboost face detector to recognise face. When an unrecognised person moves or camera's vision is blocked, an alarm goes off and user is alerted with SMS and email with a success rate of 96%.
- **Sight for Blind with Panic Button:** Built a system for visually impaired to identify objects using TensorFlow to fetch object name and Google text-to-speech to convert text to audio. Integrated an SOS button to broadcast user's location to emergency contacts through text message. Published in: International Journal of Future Generation Communication and Networking.
- **Data Encryption Standard Algorithm : Java Remote Method Invocation & OpenMP:** Analysed performance by calculating time of execution of DES algorithm serially and parallelly with JAVA RMI and OpenMP. Found that OpenMP performed better with a difference of 5ms. Published in: Journal of Advanced Research in Dynamical and Control Systems.

LEADERSHIP AND INVOLVEMENT

- Earned the position of Program Representative of School of Computer Science and carried out responsibilities of representing CS students in student organization from 2018 to 2020.
- Demonstrated a group research project at ICMRSE-19 (International Conference on Multi-Disciplinary Research Studies and Education) and elucidated critical questions from panel resulting in acceptance for publishing.
- Mentored juniors on android app projects as Core Committee Member at IEEE Computer Society.