LAKSHMI SINDHUJA KARUPARTI

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EDUCATION

Master of Science, Computer Science; Big Data Systems	**May 2021**
Arizona State University, Tempe, AZ	GPA: 3.89/4

Coursework: Data Mining, Distributed Database Systems, Foundations of Algorithms

Bachelor of Technology, Computer Science & Engineering	**May 2017**
SASTRA University, Tamil Nadu, India	GPA: 8.1/10

TECHNICAL SKILLS

Languages: C, C++, Java, Python, R, XML, HTML, CSS, JavaScript
Query languages and databases: SQL, PL/SQL, MySQL, PostgreSQL, Oracle, NumPy, Pandas
Tools: JIRA, Crucible, PREP, Visual Studio, DOORS, MATLAB, Tortoise SVN, Microsoft Excel, PowerPoint, word, PyCharm, ns3
Certifications: Machine Learning by Stanford, SAFe Certified Scrum Master, Microsoft Office from NIT

PROFESSIONAL EXPERIENCE

Collins Aerospace, Bangalore, India: **12/2018 – 6/2019**
   Software Engineer (Co-lead)

Formed a team sized 10, trained them on product development and testing, managed them by taking the role of a scrum master, the team ultimately was responsible for a savings of 200K $ for the company meeting strict deadlines.
- Developed project framework and programmed utilities in Python attaining an efficiency of 95%.
- Initiated d implemented a novel approach for handling coverage reports that reduced process time by 75%.
- Verified and validated various features of Display Window Manager application in the cockpit of AW609.
- Configured machines to simulate target environment and built Python scripts to validate the code in the target.

   Associate Software Engineer   **6/2017 – 11/2018**

Worked with US counterparts on Flight Display Software Application in Airbus C295 following D0178B standards & Agile methodologies.
- Involved in Model based development (MATLAB Simulink) and used Microsoft Visual Studio as a debugging tool
- Generated various test cases to test the models in Python and used Python/XML for testing hand code.
- Performed Model-in-loop, Software-in-loop and simulated integration testing for flight display application.
- Accessed product requirements using DOORS, took up user stories from JIRA, used Tortoise SVN as a configuration tool and raised reviews in PREP/Crucible.
- Performed data cleaning on the dataset (images and videos) from airport sensors, assigned labels for various objects like truck, runway etc. using MATLAB which was fed into algorithm that was trained to track objects on the ground from the aircraft that in turn prevented flight accidents.

   Intern   **12/2016 – _5/2017**

Collaborated and coordinated in the modification of the shape of Flight Director from crosshair to cue-shaped which increased the accuracy level of finding pitch and roll information during the flight from 95.2% to 98.6%.
- Performed Structural Coverage analysis (SCA) for models using MATLAB Simulink and LDRA for hand code.
- Automated the generation of hand code SCA reports by writing Python scripts which in turn reduced manual intervention by 90%.

ACADEMIC PROJECTS

Mathematics Club website, SASTRA University   **7/2016-10/2016**

Developed a website using HTML and CSS to create a platform for students to easily access club event details, club magazines, aptitude questions etc. Also enabled login details to the users in SQL using MySQL.

Channel Assignment in Wireless Mesh Networks, IIT Hyderabad   **5/2015-6/2016**

Performed Graph Preserving and Topo preserving simulations for various channel assignments using ns3 simulator which were used in comparing the obtained practical results with the theory.

RECOGNITIONS and EXTRA CURRICULARS

Received a dean's list scholarship at SASTRA University and a national-level merit scholarship at NCC, India

Mathematics Club, SASTRA University: **Vice-President**	**6/2014 – _12/2016**
B and C Certification in National Cadet Corps, India.	**6/2013 – _6/2016**

Volunteered in National level Pulse Polio Campaign and served as a member of "Save The Children" organization for 2 years