Rishav Dokania

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EDUCATION

Texas A&M University College Station, TX
*Master of Science in Computer Engineering (Software Systems Specialization) - **GPA: 4/4*** *Aug. 2022 – 2023*
- **Courses:** Operating System, Software Engineering, Distributed Systems & Cloud, AI Robotics

Delhi Technological University New Delhi, India
Bachelor of Technology in Electrical and Electronics Engineering - GPA 8.88/10 *Aug. 2015 – May 2019*

TECHNICAL SKILLS

Technical Stack: JavaFX, Ruby on Rails, NodeJS, ReactJS, Gradle, Git, MySQL, AWS, Jenkins, REST, Poetry
Area of Expertise: Full-Stack Development, OOP, Design Pattern, Linux, Data Structure, OS, Semiconductors
Languages: Java, C, C++, Python, Linux Bash, JavaScript, HTML, CSS, Groovy

EXPERIENCE

Cirrus Logic May 2023 – Aug 2023
Full-Stack Developer Intern | JavaFX, Python, Gradle, Jenkins, Git, Design Pattern *Austin, TX*
- Designed generic UX widgets for JavaFx Panel with Control Skin pattern. Developed robot, unit tests in Jenkins.
- Refactored 25+ commits - python scripts for 4 schemes into 1 generator interface to churn UI schema 75% faster.
- Reviewed code with peers used Git for trunk based development with high code style and PMD standards.
- Setup complex project using Gradle and refactor for version catalog with single file down from 8 files.

Texas Instruments July 2019 – July 2022
Software/Product Engineer | Python, Object-Oriented Design, Linux, Git, Jira, IC Quality *Bangalore, India*
- Lead object oriented software development to detect pre-manufacturing quality defects in Integrated Circuits. Impact of 1 year, $100M+ business. 3rd highest contributor of Patent Disclosure among 8.
- Developed modular self-documented python architecture with poetry. Used Strategy & factory pattern to build 150+ test bench using abstracted electronic objects to reduce 2 weeks from 2-6 months cycle for 15+ Projects.
- Tested with pytest - parametric unit & integration tests with CI/CD using Github Actions.
- Promoted to Senior and received Global recognition for deploying software solutions for risk management. Collaborated with Senior Fellow & Factories to upgrade quality of 25M+ chips/year using 5-Why, 8D techniques.
- Devised image processing, navigation algorithm for robotic handler to test 5000+ devices & co-authored paper.

ACADEMIC & PROJECTS

Software Architect | *Design Patterns, Multi-threading, Code Refactor, Robotics - ROS* Jan 2023 – May 2023
- Designed Hybrid Deliberative Reactive Software Architecture to decouple Perception, Cartographer & Behaviors of Survivor Buddy Rescue Robot. Refactored 1000+ lines of monolithic code into Modular & Extensible.
- Implemented Observer & Command Pattern for multi-robot Dance, Face Mirroring & Hand Gesture Interaction.
- Designed multi-threading algorithm for parallel image & audio processing. Reduced latency by 95% to below 0.1s

Web Developer | *NodeJS, ReactJS, Docker, Git, MySQL, SaaS, Heroku* August 2022 – Dec 2022
- Developed SaaS membership management for Aggie Rotaract club's 1000+ members on ReactJS, MySQL.
- Built Backend routes, controllers with Rest APIs with Agile, Test Driven development on Heroku.
- Created 30+ user stories, lead customer demo. Exceeded customer expectations with 100% UAT coverage.

ACHIEVEMENTS

1. **Patent Disclosure**: Software to Simulate and Visualize all Datasheet Parameters Over the Lifetime of the Product.
2. **Texas Instruments Global Recognition Award - 4 times** : Software to detect Quality Defect, De-risk and pull in for AWS $100M+ business, Improved Qual Board Design, Released LM74700DDF in record 3.5 months.
3. **Publications - 3 Papers**: Poster Presentation IC Quality failures (April 2022); Qualification HW Design for contamination issue (Nov. 2022); Co-author, Robotic Handler for Qualification Test Automation (April 2020).