Bhavna S Jayaram

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Professional Experience

Senior Engineer- Product Development

June 2022- June 2023

Tata Elxsi

Bengaluru, India

- Engineered a 30% reduction in errors and enhanced operational efficiency by implementing the Scrum framework for embedded systems.
- Spearheaded the adoption of Agile techniques and utilized JIRA to drive cross-functional collaboration, resulting in a 30% increase in on-time project delivery and a 20% improvement in team productivity.
- Implemented strategies to overcome impediments that hinder the team's achievement of release/sprint goals
- Facilitated meetings with cross-functional technical and business teams, and stake-holders to update, document and gather product requirements through daily stand-ups.
- Assisted in product discovery, user stories, creating vision and road-map and converting product strategy into actionable tasks for development team.
- Owned and maintained the product backlog by prioritizing features, and establishing timelines for product releases.
- Conducted regular code reviews, maintaining Agile coding standards and improving the development process.
- Proactively identified and mitigated risks throughout the feature implementation to ensure that potential issues were addressed before they impacted project timelines or deliverables.
- Spearheaded Design, Verification, and Testing (DVT), project planning, process improvement and data analysis tools/methodologies to maximize customer satisfaction.
- Generated builds in the form of binary files to be integrated with the processing side and CFPGA side. The combined builds were used on the RF modules in the official release builds.

Applications Engineer

October 2019-May 2022

Spirent Communications Inc.

Holmdel, NJ

- Maximized effective customer relationships through pre-sales and post sales support and identified future business opportunities.
- Utilized Agile scrum framework and delivered comprehensive technical training and direction for successful product launches, resulting in 20% increase in revenue and 15% boost in customer satisfaction.
- Lead the appropriate teams to refine, prioritize, and manage the backlog to best achieve the goals and product vision.
- Gathered customer test requirements and translated these to actionable items for the development team.
- Analyzing logs to debug the root cause failure of DUT/network issues affecting performance KPIs like accessibility, mobility, throughput as per the 3GPP certification procedure and carrier acceptance test requirements.
- Educated and trained new product features hands-on to customers for wireless communication products that required extensive knowledge of 5G, 4G, IMS/VoLTE.
- Worked closely with customers for needs analysis, proposal development and vendor costs to produce competitive estimates.
- Maximized the usage of inventory by 50% and thus prioritized each customer's need for testing and setup.

R&D Design Engineer (Project Coordinator)

May 2019- October 2019

Florida International University

Miami, FL

- Coordinated the development and integration of new design and manufacturing processes, following Agile-inspired workflows for driving and managing R&D projects.
- Estimated quantities and cost of materials, equipment, and collaborated with clients to determine project feasibility.
- Planned and evaluated results of the project by analysis, modeling, and experiments, built functional prototypes of products using HFSS to meet design specifications.
- Conducted research to test and analyze feasibility, design, operation and performance of equipment, components, and systems.

October 2016 - June 2017 Bengaluru, India

Mindset IT Solutions

- Reviewed project goals and objectives on monthly basis with project manager and design team.
- Completed project documentation, updated, and distributed to appropriate project personnel.

Education

Florida International University

Master's Degree in Electrical Engineering

August 2017 - May 2019 Miami, FL

Visvesvaraya Technological University

Bachelor's Degree in Electronics and Communication Engineering

August 2013- May 2017

Belgaum, India

Skills Summary

- Agile Scrum Methodology
- Wireless technology 5G,4G, IMS/VoLTE
- User stories
- Project coordination
- Documentation

- Debug and troubleshooting
- Project Management
- Data Visualization
- Customer Relationship Management
- Cross-Functional Collaboration
- Product Backlog Prioritization
- pre-sales and post sales support
- Product Vision and Product roadmap
- Release Management

Tools: Salesforce CRM, JIRA, Confluence, Microsoft Power BI, smart-sheet, MATLAB & Simulink, JTAG, Code Composer Studio (CCS), Octave, HFSS

Certifications

- Microsoft Power BI
- Digital Product Management Specialization by University Of Virginia In progress
- Certified Scrum Master (CSM) by Scrum alliance
- Certified Scrum Product Owner (CSPO)

Project Portfolio

Designed a communication System using Direct Sequence Spread Spectrum (DSSS)

- Designed a communication system based on Direct Sequence Spread Spectrum.
- Bit error rate curves and jamming margin were plotted and calculated for a system without jammer and a system with jammer with additive white Gaussian noise channel.

RF System Design and Simulation of an end-to-end 16-QAM

- A 16-QAM with transmitting and receive chain using National Instrument's AWR Microwave office.
- The theoretical bit error rate of a 16-QAM signal as a function of the ratio of the bit energy to noise spectral density to achieve SNR of 10-5 was computed.
- The Bandwidth for a roll-off factor of 0.35 was calculated. 0.5 dB I/Q amplitude mismatch in the transmit side was introduced and received Error vector magnitude was determined to plot the constellation diagram.

Optimized a printed dipole Antenna to operate at 2GHz

- A printed dipole antenna with an integrated balun was optimized to operate at 2GHz.
- The antenna was excited using the lumped port feed excitation in the ANSYS-HFSS simulation software.
- The return loss, 3D-polar plot, radiation pattern in the three principal planes, gain of the antenna, and the input impedance were observed.

Awards

- Recipient of Spot Recognition Award at Spirent Communications Inc.
- Recipient of scholarship from the department of Electrical and Computer Engineering worth USD 10,000.