

EDUCATION

Jai Narayan Vyas University

Bachelors in Engineering, Electronics & Communication

2017-2021

Majors in Digital Circuits, Embedded System & Robotics.

EXPERIENCE

Boeing, Bangalore, India

Electronics Design & Analysis Engineer

06-2022-Present

- Enabled design and development of Special Test Equipment (STE) for mixed signal systems used in defence and space applications. This includes defining the STE architecture and performing hands-on development.
- Planned meticulously version-controlled design, test procedures, and analysis results & provided technical support during the U.S. based production and testing line with 100% Milestone Fidelity.
- Lead STE design reviews to ensure adherence to development processes resulting increasing FTQ by 7.62%.
- Support proposals and bids for new test system projects & Strategized procurement of test equipment in coherence of stakeholders, ensuring the right tools for the system.

Johari Digital Healthcare Limited, Jodhpur, India

Product Engineer

09-2021-06/2022

- Strategized hardware development from prototype to manufacturing, consequently foresighted delivery of 10+ dedicated medical devices across JACUB nations (Japan, Australia, Canada, USA, Brazil).
- Engineered agile designs in close collaboration with multiple verticals and leadership across organisation to optimise component SAP BOMs, electronic part selection and lifecycle management to mitigate the Semiconductor Supply Chain Disruption ensuring 100 % design integrity and reducing the overhead costs by 60.14 %.
- Interacted with clients and supplemented technical proposals by defining hardware solutions, developing product schedules, assisting Work Breakdown Structure and providing production skew estimates.

Gridbots, Ahmedabad, India

Embedded Systems, Intern

07-2021-09/2021

- Architected, implemented and maintained firmware designs for Robotic Manipulators, Autonomous Rovers and Industrial Inspection Systems.
- Worked with multi-faceted production teams and optimised existing designs by 58% on memory critical systems with 100% integrity of tuned control mechanisms.
- Collaborated closely with key stakeholders for technical specification identification, penultimate unit feedbacks analysis and implementation to ensure 100 % customer satisfaction.

RAMAN Lab, MNIT, Jaipur, India

UG Research, Intern

05-2019-09/2019

- Developed and Implemented hardware and firmware for Epilepsy Disease Detection system with Naïve Bayes signal processing achieving transducing Accuracy of 99.2 % and prediction Accuracy of 98.6% and F1 Score of 94.6 %.
- Collaborated with cross functional scholars from the domain of Artificial Intelligence, Mechanical Engineering and Electrical Engineering to develop the EEG system with ground up Sensing, Processing, Prediction and Analysis Capacities.
- Held responsibility of Electronics Component Selection and Sourcing Focal, reduced the project cost by 34 % and lead time from 4 weeks to 8 days via local vendor identification and delegating Input Quality Check at Supplier's end.

SKILLS

Technical Skills: FPGA (Xilinx, Altera), Microcontrollers (AVR, STM32, NXP, NRF, ESP (ESP8266, ESP32) , I2C , SPI , UART , MIPI-DSI , Modbus RTU , MQTT , C , C++ , Python , Verilog , VHDL

Soft Skills: Effective Communication, Team Collaboration, Critical & Analytical Thinking, Project Management, Change/ Risk Management

Tools & Technologies: Git, JIRA, Confluence, Altium Designer, Siemens Xpedition, Questasim, Robot Operating System (ROS) Microsoft Office, Additive Manufacturing (FDM, SLA, SLS)

VOLUNTEERING

- Reviewed research papers at IEEE Region 8 conferences as a TPC during Q3 to Q4 of 2023 in domain electronic research, avionic control, etc.
- Mentored Hardware vertical at Google Developer Student Club, MBM University, Jodhpur guiding 250+ engineers in domain of electronics.
- Coordinated Embedded systems and Robotics Club in cross collaboration of SAC, IIT Bombay and Jai Narayan Vyas University to organise sessions, workshops on robotics which enabled participants at competitions at national, international level.
- Pet a Plant - sapling plantation and maintenance initiative at individual and locality level to serve a bit towards environment sustainability.

INTERESTS

Abstract Interests: Travelling, Tinkering Electronics, Video Gaming, Reading, Movies, Trekking