Kartik Shreenath Bohra

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SUMMARY/OBJECTIVE

Experienced Electronics Engineer specializing in hardware development within the aerospace and healthcare industries. Committed to creating innovative products with a blend of creativity, engineering precision, empathy, and leadership excellence

EDUCATION

Jai Narayan Vyas University

***Bachelors in Engineering*, Electronics & Communication** *2017-2021*

Majors in Digital Circuits, Embedded System & Robotics.

SKILLS

Software: MS Office, Altium Designer, Siemens Xpedition. Robot Operating System, Git, JIRA Confluence
Programming Languages & HDL: C/C++, Python, Verilog, VHDL
Hardware Stack: Microcontrollers (AVR, AVR, STM32, NRF, ESP Series), FPGA (AMD, Intel)
Serial Protocols: I2C, SPI, UART, ModBus, Mill-1553, ARINC-429, ARINC-825 (CAN)
Misc.: Additive Manufacturing (FDM, SLA, SLS), MKB Panel Design, Adobe Express Suite
Soft Skills: Electronic Product Lifecycle Management, Team Collaboration, Critical & Analytical Thinking**,** Project Management, Change/ Risk Management, Effective Communicator

EXPERIENCE

Boeing, *Bangalore, India*

Electronics System Design Engineer *06-2022-Present*

- **Developed in-house** Remote Interface (**RIU**) & Automatic Test Equipment (**ATE**) with **25K USD savings**, resulting in a **52% reduction** in checkout time for aircraft and space Line Replicable Units (LRUs).
- Enabled 100% Milestone Fidelity and achieved a **CPI** of **1.25** through **VSM design**, modular test procedures, and **tandem support** to the U.S. based production and testing line.
- **Increased FTQ by 7.62%** in Critical Design Reviews by **ensuring adherence to** development processes such as **DO-160 and DO-258.**
- Drafted new system proposals and **strategized equipment procurement**, resulting in the acquisition of the right tools for the system.

Johari Digital Healthcare Limited, Jodhpur, India

Product Engineer *09-2021-06/2022*

- Developed **4 dedicated** medical **devices** hardware at various stages of **PDLC**, including **schematic**, layout, and **DFM** ready units compliant with MDSAP & CE standards.
- **Reduced overhead** costs by **60.14%** through **collaboration** with multiple verticals and leadership, optimizing **component SAP BOMs**, electronic part selection, and implementing indigenous circuits over **COTS** parts.
- Proposed **10+** new product electronic systems, including **POC circuit** design, product schedules, and Work Breakdown Structure, resulting in **improved production estimates**.

Gridbots Technologies, Ahmedabad, India

Embedded Systems, Intern *07-2021-09/2021*

- Developed firmware for Robotic Manipulators, Autonomous Rovers, and Industrial Inspection Systems, **optimizing** existing **designs** by **58%** on **memory-critical** systems.
- **Collaborated** closely with key **stakeholders** for technical **specification** identification, **analysis** of penultimate **unit** feedback, and implementation, ensuring **100% customer satisfaction.**

PUBLICATIONS

- Kartik Shreenath Bohra & Yoshita S. Dharmadhikari, Historical case study of Fly by wire, The Tech That Expanded Human Horizons in Aviation, IEEE History of Electrotechnology Conference, Florence, Italy, 2023
- Manoj Nath, Kapil Sharma, Kartik Shreenath Bohra, Modernizing the User Experience of 'Integrated Production Visibility'- a supply chain application, Boeing Technical Journal, volume 12 issue 1 (Boeing-internal).
- David Newkirk & Kartik Shreenath Bohra, Implementation of Vedic Squaring Circuit for 32nm nodes, Journal of Data Acquisition and Process 38th spl. Edition pp3996-4001.

VOLUNTEERING

- Reviewed 34 papers as a TPC Reviewer at IEEE Region 8 conferences, contributing to the advancement of electronic research and avionic control.
- Developed and deployed "Supply Mitra," an IoT-based curfew vigilance and resource management system, in collaboration with Municipal Authorities and the National Informatics Counsel of India.
- Mentored 250+ engineers in the Hardware vertical at Google Developer Student Club, MBM University, Jodhpur, fostering their growth in the field of electronics.
- Led Embedded Systems and Robotics Club in collaboration with SAC, IIT Bombay, and Jai Narayan Vyas University, organizing sessions and workshops on robotics, resulting in participants' success at national and international competitions.