CURRICULUM VITAE

Donvan Zailsingh Nayak
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CAREER OBJECTIVE:

To attain the post of Sr Embedded Engineer in your esteemed organization, where I can utilize my leadership skills towards the development of the organization

CAREER SUMMARY:

A PhD degree in Systems and Control Engineering with over 8+ years of extensive experience in solution architecture, design and development of embedded products (Firmware & Hardware) and solutions primarily aimed towards achieving energy efficiency and low power. The products find suitability in a variety of domains viz., Entertainment, Health Care, POS, Smart Grid and Telecom Infrastructure sectors. My designed and developed products for both government and corporate clients including Indian Army, MHRD, BARC, Indian Railways, IDEA cellular, T-Mobile US among others,having expertise in working on various hardware and software platforms and professional programmer in ARM .Good Sound knowledge in tools such as Altium, MatLab, Linux and also developed my own GCC libraries for various processor like Renesas,Atmel,ST,FreeScale ASIC's. Having experience of working at different positions in different kinds of organizations (start-ups, SME, MNC) has given me an in-depth knowledge and confidence in handling any role with ease and efficiency. My role at responsible positions has given me the ability to handle pressure situations and multiple projects simultaneously.
Having involved from concept to commissioning stage for a handful of products of varying complexities, my experience has given me a strong understanding of product life cycle. While contributing to the architecture, design and development of the product / solution, my experience as an entrepreneur has given me an insight about the business life cycle and the ability to understand the viability of a project from a financial perspective.

EXPERIENCE SUMMARY

MARCH 2013 – OCT 2016

Sr Embedded ENGINEER (R&D), ADVANCED EMBEDDED RESEARCH LABZ (AERLABZ) PVT LIMITED HYDERABAD, MUMBAI, BANGALORE

My initial experience in design and development in my earlier organizations, the opportunity that I got with **AERLABZ** was to lead a team of R&D engineers. The team was with 4 firmware engineers and 1 hardware design engineer. The company had started operations in embedded product development with the induction of me and other 5 colleagues and did not have any resource for design and development of embedded products. It is from this stage, I learnt playing the role of a lead guiding the firmware and hardware development teams to bring out the first few microcontroller based boards that were used as prototypes for many applications and product demonstrations. It is during this period I learnt the basics of product planning, management and have designed and delivered a variety of products that were commissioned successfully for different electric distribution companies in India.

My key responsibilities include

√ Heading and handling all product development / solution architecture activities of the organization.
√ Managing the P&L of the R&D division as a business unit.
√ Manage daily operations across engineering, product development, product management, and manufacturing disciplines.
√ Prepare project plans/budgets and project reports
√ New Product initiation and development (from concept stage till commissioning) based on the organizational needs.
√ Market analysis and Product / Solution release strategy.
√ Managing a team of around 40+ engineers in cross functional domains viz. embedded hardware development, firmware development, IT application development, and testing and product support teams.
√ Product release management and configuration tools management
√ Planning the phases of projects, creating WBS, assigning tasks, team engagement and motivation.
√ Meeting potential customers and presenting the solution model.
√ Customer engagement.
√ Manage IP activities, including patent filing and technology roadmap planning.

DEC 2013 – FEB10, 2018

Sr Embedded ENGINEER (R&D), SABVIDH ENERGY SOLUTIONS PVT LIMITED BANGALORE

Though my stint with SABVIDH was for a short duration (around 14 months), that experience has given me an insight of the work culture in a typical MNC. During this tenure, I got good experience of communicating with overseas customers on a regular basis for their project requirements. This

exposure has given me a good foundation in interacting with many overseas customers during my journey with SABVIDH.

Key responsibilities

√ Firmware development.

√ Handling the off-shore firmware developmental activities.

√ Coordinating between on-site team and the off-shore teams.

√ Conducting periodic calls to the customer to understand their business requirements and converting them to Requirement Specifications.

EDUCATION

JUL 2008-AUG 2018

M.Tech, SYSTEMS AND CONTROL ENGINEERING DEPARTMENT, INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, INDIA

PhD, SYSTEMS AND CONTROL ENGINEERING DEPARTMENT, INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, INDIA

TECHNICAL EXPERTISE

Real Time Operating System   **:** FreeRToS ,RTAI , RTLinux ,UCOS

Arm and DSP Target Processors: ARMX,CortexMX Series,TMS320FXXXX

Programming Language   **:** C,C++,Structure ASM

Software Tools   **:** MatLab,Labview,Altium(8Layers),MagNet,Gcc

Protocols Stacks   : i2c,SPI,BlueTooth,Modbus,CAN,M-Bus(Wireless),Zigbee, Wi-Fi

ACTIVITIES

Papers Referred in Journals:

1) Jailsingh Nayak D, Nataraj PSV (2017) An Algorithm for Robust Stability Analysis based on GPU Parallel
Computing, Int. journal of Systems Assurance Engineering and Management (Springer).

2) Jailsingh Nayak D, Nataraj PSV (2017) Reliable Computation of Multivariate B-Spline Coefficients based on
   GPU Parallel Computing, Int. Journal of Systems Assurance Engineering and Management (Springer)

PAPERS IN CONFERENCE PROCEEDINGS/POSTERS:

1) Jailsingh Nayak D, Nataraj PSV (2016) Performance Comparison of a CUDA interval arithmetic library with a standard interval arithmetic library
   , GPU Technology Conference (GTC), San Jose, California, USA.

PERSONAL INFO

Nationality   **:** Indian

Marital Status   **:** Married

Languages Known   **:** English, Hindi and Telugu

DECLARATION

I hereby declare that above mentioned information are true in the best of my knowledge and belief.

Place: **Bangalore**

Date: **3/11/2017**   (**D.Zail Singh Nayak)**