Subrahmanya S

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CAREER VISION:

To pursue a challenging role in an organization that offers me an opportunity to utilize my skills and knowledge, having an open environment for new ideas and continuously upgrade my knowledge with latest technologies.

RELEVENT EXPERIENCE: 1Year and 8 months

Intel India Pvt Ltd, Bangalore, India July, 2013 – July,2014
Component Modeling Intern

- Module development and Integration
- Automation of The Complete Virtual Prototype Deployment Environment For Mobile SoC Design
- Toggle Coverage- Verification

Verifxn Pvt Ltd, Bangalore, India March, 2013 – July,2013
Technical Intern

- Development and Implementation of 8B/10B encoder for MIPI Protocol
- Tools - Icarus

Ryangs Infotek Pvt Ltd, Bangalore June, 2012 –Nov, 2012
Embedded Engineer

- Design of Smart Soil Analyzer
- Tools- MP Lab

TECHNICAL SKILLS:

Languages

- SystemC | C++ | 8051 Programming | 8086 Programming | VHDL |
- Verilog | C | C#.Net | Embedded C |

Tools and Libraries

- Xilinx IDE | Model Sim | Cadence Virtuoso | Visual Studio | Virtualizer |
- MP Lab | Keil | PSoC Creator | Orcad | Alliance |

Operating Systems

- Windows | Vista, XP | Linux |

EDUCATIONAL QUALIFICATIONS:

Master of Technology in VLSI and Embedded System (VTU, Percentage **– *84 %*)** June, 2012 – Jun 2014
PESIT Bangalore South Campus, Bangalore

Bachelor of Technology in Electronics and Communication Engineering (VTU, Percentage **– *78.05 %)***
S B M Jain College Of Engineering, Bangalore June, 2008 – Jun 2012

PUC (PU Board, Percentage **– *81.16%*)**
Govt P U College, Sagar May 2008

High School (PU Board, Percentage **–*88.16%)***
Govt High School, Kargal Jun 2006

PROJECTS:

❖ **Wireless Eye Controlled Human Machine Interface**

Details

- Objective - To design a Human Machine Interface, which can be controlled using EOG signals and final output is to be used to move cursor on the Graphic Display, which has several buttons and each button is controlled by blinking of eyes to activate the corresponding appliance or action.

Role

- Developed Application Part of Design with Microcontroller
- Platform – Windows | Tools – Keil | Language – Embedded C |

❖ **Automation Of The Complete Virtual Prototype Deployment Environment For Mobile SoC Design**

Details

- Objective - Virtual prototype helps in reducing the product development time by parallelizing the Software and Hardware development, by providing a simulated Hardware functionality to pre-develop and verify the complete software before the silicon is available, there by significantly reducing the system bring up time once the Hardware is available ,In Automation it will Setup sysway environment required for VP tool usage and Configure VP system with required s/w configuration and launching of VP simulation by invoking simulation tools.

Role

- Developed One Click solution for Virtual Prototype Setup
- Platform – Windows | Tools – Virtualizer | Language – SystemC |

❖ **8B/10B Encoder for MIPI Protocol**

Details

- Objective – MIPI has two specifications for high-speed physical layer designs to support multiple application requirements. To provide High Speed Access we use 8B/10B encoder. 8b/10b is a line code that maps 8-bit symbols to 10-bit symbols to achieve DC-balance and bounded disparity, and yet provide enough state changes to allow reasonable clock recovery. This means that the difference between the count of ones and zeros in a string of at least 20 bits is no more than two, and that there are not more than five ones or zeros in a row. This helps to reduce the demand for the lower bandwidth limit of the channel necessary to transfer the signal.

Role

- Implemented 8b/10b bit encoding scheme for MIPI protocol
- Platform – Windows | Tools –Icarus | Language – SystemC |

❖ **Smart Soil Moisture Analyzer**

Details

- Objective - Easy install methodology to monitor and indicate the level of soil moisture that is continuously controlled in order to achieve maximum plant growth and simultaneously optimize the available irrigation resources. A simple opamp based comparator circuit is used coupled with relay units which control the water pumps. The use of easily available component reduces the manufacturing and maintenance costs.

Role

- Developed Data Acquition and Processing System
- Platform – Windows | Tools – MP Lab | Language – Embedded C |

ACADEMIC PROJECTS:

- Implementation of Booth for 8 bit signed multiplication
- Design of SAR by State Machine model
- Elevator Control Designing using the Cypress PSOC 3 kit

AREA OF INTERESTS:

- Embedded Programming
- Hardware/Software design
- RTOS
- Testing

STRENGTHS

- Hard Worker
- Optimistic
- Good listener
- Self-Motivated

PBLICATION:

- International Paper Titled "**Novel Code Converter Employing Reversible Logic**", An International peer-Reviewed research journal, International Journal for Technological Research in Engineering, Vol1, Issue 3, November 2013, ISSN No.2347 – 4718

WORKSHOPS

- Participated in the Two Day National Workshop on "SoC-COMPONENTS& ARCHITECTURES" held at Reva College of Engineering
- Participated in the Two Day National Workshop on " ASIC DESIGN USING OPEN SOURCE EDA " conducted by VTU
- Participated in the One Day National Workshop on "PSoC" conducted by CYPRESS SEMICONDUCTOR, held at PESIT

INVENTION AWARD - INTEL

- Smart Audio Delivery Systems Using Wi-Fi/Bluetooth

ACHIEVEMENTS

- Honored by **INTEL** as **BEST INTERN of the Year-2014** in Bangalore Site
- Honored by PESIT for being **Topper** in the college during **M Tech**
- Appreciated for securing Distinction for the degree at a college fest at Sri Bhagawan Mahaveer Jain College of Engineering
- Awarded 2nd place for the live model of "**Gomuthra Gadiyaram**" in District level Science

HOBBIES

Reading Books | Trekking | Solving Sudoku | Listening to music |

***DECLARATION*:**

I hereby assure you that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place: Bangalore **(Subrahmanya S)**