Technical Architect Technical Architect Technical Architect - HCL Technologies Work in an Organization where I can apply and build my technical, managerial and analytical skills. Work Experience Technical Architect HCL Technologies April 2018 to Present Embedded Systems Software Architect deputed at Client location Alstom Transport India from Apr'2018. HCL Technologies - Bangalore, KARNATAKA, IN April 2018 to Present Client Loation Alstom Transport Hands on experience: Part of MooN(M out-of-N) platform integration team for the integration of Gateway Involved in testing and integration of Gateway which is part of SCU(Safe Computing Unit) Shell scripting and Python scripting and C programming Networking Team Lead and Individual Contributor UniQtronics Solutions Private Limited - Gurgaon, HARYANA, IN November 2017 to Present Project: Electrical Vehicle Charger Controller based on Atmel SAMA5D27 Nov'2017-Till Date Role: Team Lead and Individual Contributor Team Size: 1 (from software and Embedded Systems group) Client: Delta Electronics, Gurgaon Technologies: ARM -A5 software board bringup (u-boot, Kernel customization & compilation), GPIO, SPI, OCPP-Open Charge Point Protocol (Libwebsockets), CANSockets (CAN 2.0B), RS485/Modbus(libmodbus), GUI for Charger developed based on Qt Creator. - Developed application for communication between EVSE (Electrical Vehicle Supply Equipment) which consists of System-on Module based on ARM architecture (Atmel SAMA5D27) and CIMS (Charging Infrastructure Management System) using OCPP (Open-Charge Point Protocol) using libwebsockets. - Developed application for CAN communication between Charger and EV using SocketCANs - GUI developed for Charging infrastructure based on Qt Creator - Application for RS485/Modbus communication between Energy meter and EVSE Controller (Atmel SAMA5D27). - GPIO programming for Digital Inputs and Digital Outputs - SPI Communication between EVCC and external ADC (LTC2492) connected through SPI. - Quectel's EC25, EG95 module interfaces Manager in M/s.UniQtronics Solutions Private Limited - Bangalore, KARNATAKA, IN December 2016 to Present 2016. Electrical Vehicle Charger Controller UniQtronics Solutions Private Limited - Bangalore, KARNATAKA, IN December 2016 to Present Bangalore Dec'2016 to Till Date Hands on experience: Software board bringup of ARM based boards (Atmel SAMA5D27, Freescale IMX6 and Raspberry Pi3) which involves BSP and

Kernel customization, Device drivers, Firmware development (Middleware like SPIDev, I2CDev, UART) and Application development on ARM boards like image processing OpenCV and MIPI CSI camera interfaces. Atmel's SAMA5D board used as Electrical Vehicle Charger Controller board which includes software board bringup and then application development based on GPIO, RS485/Modbus, CAN Bus interface, ADC Programming (SPI interface) and OCPP (Open Charge Point Protocol) programming using websockets. C++ Programming for Device Drivers, Board Bringup, Embedded Systems Development Algorithm Development for Image Processing using OpenCV and Qt IDE MatLab, Simulink and Other toolboxes for Embedded Development and Simulators Embedded C programming for Microchip PIC & dsPIC microcontrollers (MPLAB X IDE) Freescale's IMX6 Board Bringup, BSP Customization Project Management Experience on ARM Architecture Boards (Freescale IMX6 (ARM-A9), Raspberry Pi(ARM-A7), Atmel SAMA5D35, SAMA5D27 (ARM-A5) Team Lead/Project Manager UniQtronics Solutions Private Limited December 2016 to Present Team Size: 2 Solution Architect / Project Manager UniQtronics Solutions Private Limited December 2016 to Present Team Size: 1 Client: UniQtronics Solutions Private Limited Technologies: U-boot, C programming, Ubuntu Linux, Socket Programming, IPC, OpenCV, Computer Vision, Atmel, System on Modules, ARM Processor, Embedded C, UART, ADC (SPI), Temperature Sensor TMP102 (I2C), Groove's Alcohol Sensor, SPI based RFID (RC522) This project involves the System-on-Module (ATSAMA5D21-ARMA5) board on which ubuntu is ported. This board is connected with a GPS module which pumps out the lat long co-ordinates which helps in tracking the position of the vehicle. This board also got a camera which streams the video to a remote server. Board also got other interfaces for the sensors like temperature sensor (TMP102 with I2C interface), fuel level indicator connected to ADC (SPI), SPI based RFID (RC522), GPS and GPRS/GSM (Quectel's LM80 and EG95/UG95/EC25). Responsibilities: - Solution Architect - Team Lead - Individual Contributor - Design & Implementation Engineer Solution Architect/Project Manager Wipro December 2016 to Present Team Size: 2 Client: Wipro Technologies: Embedded C programming using MPLAB for PIC microcontroller Industrial Automation through Internet of Things. This project involves Ultrasonic Collision avoidance system which is integrated with PIC

microcontroller and Microchip's BM77 Bluetooth module. This will give the distance between sensor and any avoidance that is in front of the sensor and will notify the user through BLE GATT service. Responsibilities: - Solution Architect - Team Lead - Individual Contributor - Design & Implementation Engineer Board Bringup, Embedded Systems Development Si2 Microsystems Limited - Bangalore, KARNATAKA, IN January 2015 to Present Bangalore Jan'2015 to Till Date Hands on experience: C++ Programming for Device Drivers, Board Bringup, Embedded Systems Development Algorithm Development for Image Processing using OpenCV and Qt IDE MatLab, Simulink and Other toolboxes for Embedded Development and Simulators Embedded C programming for Microchip PIC & dsPIC microcontrollers (MPLAB X IDE) Freescale's IMX6 Board Bringup, BSP Customization Experience on ARM Architecture Boards (Freescale IMX6 (ARM-A9), Raspberry Pi(ARM-A7), Atmel SAMA5D35, SAMA5D27 (ARM-A5) Assistant Manager M/s. Si2 Microsystems Limited - Bangalore, KARNATAKA, IN January 2015 to December 2016 Team Lead Si2 Microsystems Limited April 2016 to August 2016 Team Size: 5 Team Lead IISc/DRDO March 2015 to March 2016 Team Size: 1 Client: IISc/DRDO Technologies: Qt IDE, C++, Yocto Project, OpenCV Involved in Board bringup of Freeescale's IMX6DL processor board (ARM-A9), Algorithm development using OpenCV. This involves board bringup, BSP customization, Device drivers and application development for getting data from I2C, SPI, Serial(UART) sensors. My role this project is for the BSP customization which involved U-boot customization since there is a memory technology (DDR3 to LPDDR2), kernel customization, ubuntu rootfs. After the board bringup activities are done, interfaces development like SPI, I2C, UART. Application development for getting the data from different sensors using SPI, I2C and UART are been designed. Image processing based application are been developed using OpenCV, Qt IDE, C and C++ programming. Responsibilities: 1. Team Lead 2. Design & Implementation Engineer Assistant Manager-Embedded Systems in M M/s. Si2 Microsystems Limited - New Delhi, DELHI, IN January 2011 to January 2015 Tata Advanced Systems Limited - New Delhi, DELHI, IN January 2011 to January 2015 Hands on experience: MatLab, Simulink and Other toolboxes - 4 Yrs C, C++ programming (Visual Studio, Qt IDE) - 3 Yrs VeriLog HDL- 1.5 Yrs Designer, Programmer (

Python Scripting), Solution Architect Tata Advanced Systems Limited July 2014 to December 2014 Team Size: 1 Client: Aeronautical Development Agency Technologies: Python,3ds Max, OpenScene Graph, 3D Projector, High-end GPU, Force feedback system, Motion Capture Systems Designed architecture for Virtual Reality Solution to the one of the India's research laboratory in the defense sector. This includes integration of software, hardware and display solutions like 3D projector, high-end workstations, GPUs, Force feedback systems etc. Also developed ship's 3D engine room for in-house Virtual Reality Development which also includes digital interactivity. Also involved in designing the system, vendor engineering, customer interaction. Responsibilities: 1. Python Scripting 2. Solution Architect 3. Team Lead Designer/Lead Tata Advanced Systems Limited May 2013 to September 2013 Team Size: Two Client: WESEE Technologies: Qt IDE, C++ Involved in designing and implementation of MMI (Man-Machine-Interface) pages of the module of ASW (Anti Submarine Warfare) by using Qt IDE. This includes designing of GUI pages, interaction with other modules like GDM (Graphical Display Manager) , MDM (MFC Data Manager) and MCM (MFC Communication Manager) etc. This we have implemented for one of our clients i.e WESEE (Weapons & Electronics Systems Engineering Establishment) which is a R&D organization working for Indian Navy. Responsibilities: - Software Programmer Developer Tata Advanced Systems Limited April 2012 to December 2012 Team Size: 2 Technologies: MatLab, Simulink, Computer Vision, Image Acquisition & Processing toolbox Developed video stabilization algorithm based on SURF detection using Computer Vision, Image Acquisition & Processing toolboxes of MatLab for UAV (Unmanned Aerial Vehicle) Responsibilities: 1. Designing and developing the code Developer Tata Advanced Systems Limited April 2011 to July 2012 Team Size: 1 Technologies: X-Plane, C++, MatLab, Simulink Developed Part Task Trainer based on X-Plane gaming engine. This includes design of flight simulator with different operational conditions, instructor -trainee modules and different malfunctions to be injected based C++ programming. An additional module called motion platform is designed based on stewart platform based on MatLab, Simscape & Instrumentation toolbox and Simulnik. Responsibilities: 1. Designing and developing the code Designer Tata Advanced Systems Limited June 2011 to December 2011 Team Size: 2 Technologies: System

Integration, Application software using Qt4, C++ Solution Architecture with integration of different hardware components and software interfacing. Responding to RFPs/Tender enquiries released by Indian Navy. Worked on some software tools developed in Qt which includes MMI and GDM. Responsibilities: 1. Solution Architect 2. Designer Assistant Manager in M Reliance Energy Limited - Noida, UTTAR PRADESH, IN July 2008 to December 2010 2.5 years Designer Reliance Energy Limited - Hisar, Haryana, IN July 2008 to December 2010 Team Size: 6 Technologies: PLC & DCS Took part in the design of PLC and DCS logics for RGTPP. I was one of the members of Engineering team placed at Noida for 2 x 600 MW Rajiv Gandhi Thermal Power Plant, Hisar, Haryana. which was the India's first thermal plant with a capacity of 600MW per unit. My job roles and responsibilities mainly focused on electronics part like DCS (Distributed Control Systems) and PLCs (Programmable Logic Controllers). I have excelled in study of DCS as well PLC. Apart from these I have prepared cable schedules and interconnection charts for various sub systems of power plant like Electrical systems, Motorized Operated Valves etc Responsibilities: 1. Completed logics (Interlocks & Permissives) checking in PLC of Coal Handling Plant. 2. Completed commissioning of Control & Instrumentation part of CHP(Coal Handling Plant) in 2 x600 MW Rajiv Gandhi Thermal Power Plant, Hisar, Haryana Verilog Designer DigigatesVLSI - Visakhapatnam, ANDHRA PRADESH, IN January 2005 to January 2006 Technical Skills: Languages: C, C++, MATLAB, Simulink, Modelsim 5.5, Embedded C Scripting Languages: Python, Bash Operating Systems: Windows, Ubuntu, Debian, RHEL HDL Languages: Verilog HDL. Virtual Reality: Vizard4, Python Scripting GUI: Qt Designer, MatLab GUIDE IDE for Embedded: MPLAB X IDE Image Processing: Matlab Image Acquisition & Processing, Computervision , OpenCV Work Experience: Managerial Activities: - Lead a team of 4 engineers in UniQtronics Solutions Private Limited which includes 1-senior engineer (with 5 yrs of Experience), 1 Engineers (with 2 yrs of Exp) and 1 trainee (Freshers) in Embedded Systems (Software) group. - Lead a team of 5 engineers in si2 microsystems which includes 1-senior engineer (with 5 yrs of Experience), 2 Engineers (with 2 yrs of Exp) and 2 trainees (Freshers) in Embedded Systems (Software) group. - Involved in appraisal cycle(as Appraiser) of two team members for 2013-2014 in Tata Advanced Systems Limited - Dealt

with different teams from different groups. VeriLog Designer DigigatesVLSI - Visakhapatnam, ANDHRA PRADESH, IN January 2005 to January 2006 Team Size: 3 Technologies: VeriLog, Modelsim 6.5, Xilinx Spartan-II, Leonardo Spectrum Design and FPGA implementation of 8-bit micro controller using verilog HDL using MOTOROLA MC68HC05 instruction set" deals with architectural design , functional simulation using testbench and synthesis of microcontroller on FPGA Prototyping board (Xilinx XC2s200pq208) .Results of micro controller operations were tested manually by using switches and LEDs. Responsibilities: 1. Design & Development Curtain controller Home Brain, Kee Inc August 1992 to August 1992 Technologies: Embedded C programming using MPLAB for PIC microcontroller Next generation Bluetooth based Home Automation product which can be accessed & controls the appliances anywhere by using smart phones. This involves smart switches for light controller, fan controller, Dimmer, Curtain controller, IR blaster etc. Wireless part involves Bluetooth module (2.4 GHz). My role in this project includes Embedded C programming with MPLAB 8.92/MPLAB X IDE for PIC24FJ256GB106 (Field Device Modules) and PIC32MX795F512L for the gateway which has got Ethernet as well as WIFI interfaces. Bluetooth module (Microchip's BM70/BM71/BM78) interface with PIC24FJ256GB106 and implementation GATT profile communication between Mobile and Controller using BLE. MPLAB Harmony for programming PIC32MX microcontroller which is used as Central Gateway for Home Automation. Responsibilities: - Solution Architect - Team Lead - Individual Contributor - Design & Implementation Engineer Client: Home Brain, Kee Inc Technologies: Embedded C programming using MPLAB for PIC microcontroller Next generation wireless based Home Automation product which can be accessed & controls the appliances anywhere by using smart phones. This involves smart switches for light controller, fan controller, Dimmer, Curtain controller, IR blaster etc. Wireless part involves zigbee module (2.4 GHz). My role in this project includes Embedded C programming with MPLAB 8.92/MPLAB X IDE for PIC24FJ256GB106 (Field Device Modules) and PIC32MX795F512L for the gateway which has got Ethernet as well as WIFI interfaces. Responsibilities: - Solution Architect - Team Lead - Individual Contributor - Design & Implementation Engineer Education Master in Technology National Institute of Technology -

Durgapur, WEST BENGAL, IN June 2008 M.Tech. in Telecommunication Engineering National Institute of Technology - Durgapur, WEST BENGAL, IN B.Tech. in Electronics & Communication Engineering Jawaharlal Nehru Technological University - Hyderabad, ANDHRA PRADESH, IN

Name: Joseph Jordan

Email: john64@example.net

Phone: (542)917-4767