**GANESH**

**E-mail id:** **ganesh.370622@2freemail.com**

**SUBSTATION AUTOMATION ENGINEER**

Seeking challenging and growth oriented opportunities in the Industry

**PROFILE:**

* Technically competent **SUBSTATION AUTOMATION ENGINEER (IEC61850)** with **four** **and half years** of professional excellence in entire substation automation system testing andcommissioning.
* Hands on commissioning experience in ALSTOM, ABB, SCHNEIDER ELECTRIC AND SIEMENS products using different protocols IEC61850, IEC 104, IEC101, IEC103, DNP3.0 and MODBUS.

**TECHNICAL SKILLS SUMMARY:**

**Testing and Commissioning:**

* Complete automation and protection scheme verification (Control and Relay Panel) for different voltage levels 765kV, 400kV, 220kV, 66kV and 33kV.
* Configuration and testing of Auto Reclose, Voltage Synchrocheck functions in Bay Control Units.
* Ring formation and trouble shouting of fiber, copper networks and configuring Network Monitoring System.
* Installation and commissioning of SCADA Server, Gateway and RTU systems.
* Configuration of HMI with controls, measurements, events, alarms and Status blocks.
* Integration of Bay control Units, Protections Relays and Multi function meters with SCADA server using IEC61850, IEC 104, IEC103, IEC101 and MODBUS protocols.
* Configuration and testing of interlock logics for Isolators, Circuit Breakers, Earth Switch. · Configuration and testing of voltage selection logics.
* Configuration and testing of GOOSE and Protection Signal’s between IED’s and integration with SCADA system.
* Third parity IED’s integration with SCADA system using IEC 61850, MODBUS and IEC 103 protocols.
* GOOSE configuration between ABB, ALSTOM and SIEMENS relays using the following tools ALSTOM-IED CONFIGURATOR, ABB-PCM600 and SIEMENS-DIGSI.
* Configuration of RTU and Gateway system to sending the data from Substation to Load Dispatch Centre’s and receiving the controls from master SCADA through PLCC link over IEC101 and IEC104 protocols.
* Commissioning and testing of event logger systems.
* Automatic disturbance recorder configuration for various types of relays.
* Control and Relay inter panel wiring and scheme checking.
* GPS receiver commissioning and testing of time synchronization for all IED’s. · Configuration of Ethernet switches, Modems and routers.

**Design and Engineering:**

* I/O list preparation for Bay Control Units, Remote Terminal Units and Protection Relays as per the approved scheme.
* Designing of managed and unmanaged Ethernet network with Copper or Optical Media backbone.
* Designing of system architecture and schematic drawings as per requirements.
* Designing of complete HMI including the Single Line Diagram, Measurement blocks, Annunciations and Control Function Blocks.
* Designing of complete Configuration file for Bay control Units, RTUs, Gateways and Protection Relays.

**Software handled:**

* AREVA - PACiS 4.4, PACiS 4.5 and PACiS 4.6 versions, MiCOM S1 Studio, IED Configurator, RTMS, Crystal report.
* ALSTOM - PACiS 4.6 versions and DS Agile versions, MiCOM S1 Agile, IED Configurator, BiTRONICS M871, ISaGRAF 5.2 and Archive Manager.
* Schneider Electric - PACiS SE 4.6 version, SCL Viewer, MiCOM S1 Studio and IED Configurator.
* Siemens – DIGSI 4.83
* ABB – MicroSCADA (SYS600 9.3, SYS600 9.4), IET600 5.3, ITT Synthesizer, RTUtil-500, RTUtil-560, Multiprog, PCM600-2.5 and PCM 600-2.6 for relay and BCU configuration.
* Goose Observer, TMW Protocol test harness, IPscan, XML Marker, IEC61850 browser and IEC

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| 61850 Test Suite, Advantech\_DiagAnywhereUtility\_V1\_01\_00.· | Modbus - Modscan, |
| Modpoll and RishMaster3440 Modbus Tester· | A-eberale - Winconfig\_9.9.5, Winconfig |

10.5.3 and WinREG.

* Ruggedcom – NMS (SNMPc) for network monitoring.

**Computer Skills:**

* Installation and Trouble Shooting of Windows 2000, Windows XP, Windows Server and Windows7 Operating Systems.
* Having Proficiency in Microsoft Office, MS Paint, MS Power point and MS Excel etc. products.
* Having very good knowledge about networking and Trouble shouting of network related problems.
* Operating System and Drivers installation for Industrial Computers.

**Work Experience Details:**

**Current Employer:**

**Employer** **:** ABB Global Industries and Services Private limited, Chennai**.**

**Designation** **:** SCADA Design and Commissioning Engineer

**Experience** **:** Since November-2015.

**Previous Employer:**

**Employer** **:** NISSI Engineering Solution Private limited, Chennai

**Designation** **:** Senior Engineer - SCADA.

**Experience** **: 3** years and 5 months.

**Jobs and Responsibilities:**

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| **Organization-1 :** Nissi Engineering Solution Private Limited, Chennai. |  |
| **Period** |  | **:** June 2012 to November 2015 |  |
| **Designation** | **:** Senior Engineer (SCADA) |  |
| • | Server and Client system installation (main and standby). · | DS Agile software |
|  | installation. |  |

* Ring formation and checking all the IED’s communication with server. · Addressing of DI, DO, AI cards.
* MCL file configuration for all MiCOM relays.
* Interlock logics configuration as per scheme in Database for Isolator and Breaker remote operations.
* Auto reclose configuration and testing for main and tie breakers.
* Voltage selection logics configuration and testing.
* Isolators, Breakers remote operation testing from BCU and HMI.
* Voltage synchronization configuration (Type-1 and Type-3) and testing.
* Measurements scaling configuration from BCU.
* Various MiCOM Relay protection signals testing.
* GPS installation and time synchronization for all BCU’s, relays using SNTP and IRIG-B.
* REL670, REG-D, REG-DA via IEC61850 integration with SCADA system.
* Disturbance recorder Bitronics M871 relay integration with SCADA system.
* SATEC, Accord and Rishmaster MFM’s via MODBUS protocol integration with SCADA system.
* IEC 60870-5-101 gateway configuration and signals testing with Master Station.
* Archive manager installation and daily log sheet preparation.
* Network monitoring system configuration using SNMPc.
* Disturbance relay configuration and testing.
* PACIS and Crystal report software installation.
* Firmware up gradation of BCU’s.
* Inter panel wiring done for event logger system.
* Wiring schedule preparation.
* BCPU backup protection testing (Over current, Earth fault and VT fuse fail).
* Router and Ethernet switch configuration.
* Control and relay inter panel wiring and scheme checking.
* IEC 60870-5-104 gateway system configuration and testing (Main and Standby).
* VOIP phone configuration.

**Projects Handled:**

Project -1: 2x80MW BMM Ispat India Pvt. Ltd- Hospet, Karnataka

Project -2: 2x70MW Suryadev Steels and Alloys- Gummidipoondi, Tamil Nadu Project -3: 3x20MW National Hydral Power Corporation- Rangit Nagar, Sikkim Project -4: 800MW CLP India Ltd- Paguthan, Gujarat

Project -5: 220/132/33kV MSETCL Substation- Ghathodi, Yavatmal Project -6: 220/132/33kV MSETCL Substation- Nanded City, Pune

Project -7: 220/132/66kV GETCO Substation - Sartanpar, Morbi

Project -8: National Transmission Assert Management Centre, Hisar, Silchar& Durgapur Project -9: 765/400kV RRVPNL Grid Substation - Phagi, Jaipur

**Organization-2 :** ABB Global Industries and Services Private limited, Chennai**.**

**Period** **:** Since November-2015

**Designation** **:** SCADA Design and Commissioning Engineer

**Software handled:**

* ABB – MicroSCADA (SYS600 9.3, SYS600 9.4), IET600 5.3, ITT Synthesizer, RTUtil-500, RTUtil-560, Multiprog, PCM600-2.5, PCM 600-2.6 and PCM 600-2.7 for relay and BCU configuration.

**Jobs and Responsibilities:**

* Installation and Commissioning of MicroSCADA Pro Control System SYS 600(ABB)IEC61850 Protocol.
* Preparation of Single Line Diagram in SYS 600 Monitor Pro.
* Preparation of data base and configuration in tools manager.
* SCIL and VSCIL programming experiences.
* IEC61850 signals testing using ITT Synthesizer.
* Knowledge on configuring IEC60870-101,IEC60870-104, Modbus, DNP3.0 and SPA protocol devices on SCADA.
* In IET600 database creation, SLD creation, NCC configuration, GOOSE and third party relay configuration.
* Database configuration in RTUtil500 and RTUtil560.
* Factory Acceptance Testing

**Projects Experience:**

Project: 220kV Altomelipilla Substation, Chile.

Customer: Electrans S.A

Project: 220kV Pichirropulli Substation, Chile.

Customer: Electrans S.A

Project: 220/66kV Lamina Armerillo Substation, Chile.

Customer: Colbun

Project: 220kV Kimal Substation, Chile.

Customer: SATT S.A.

Project: 132/33kV Jesselton Waterfront, Malaysia.

Customer: SABAH Electricity. Job- Factory Acceptance Test

Project: 132/33/11kV Elopura, Malaysia.

Customer: SABAH Electricity.

**PERSONAL PROFILE:**

**Educational Development:**

**BE- Electrical and Electronics Engineering**

BharathNiketan Engineering College, Theni.

Affiliated to Anna University, Tiruchirappalli.

Performance – 74.59%

**Diplomo- Electronics and Communication Engineering**

Rukmini Shanmugam Polytechnic College, Madurai.

Affiliated to DOTE, Chennai.

Performance – 74.62%

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| **Personal Information:** |  |  |
| **D.O.B** | **:** 14-03-1988 |
| **Gender** | **:** Male |
| **Marital status** | **:** | Single |
| **Languages Known** | **:** Tamil, English, SpanishRead, Write & Speak. |
|  |  | Hindi  speak |
| **Passport Validity** | **:** | Up to 09/04/2022 |

**Declaration:**

This information provided by me is true to the best of my knowledge, for the current time Frame. I shall be solely responsible if any of it is found erroneous.

**Place: Chennai** **yours sincerely,**

**Date:** **GANESHBABU**