**RESUME**

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| **Deepan Babu. P** |  | **Mobile: +1-7133147155** |
| 10300, Cypresswood Dr,  Houston, |  | **E-mail:** [pdeepanbabu@gmail.com](mailto:pdeepanbabu@gmail.com) |
| Texas, USA |  | **Website:** [pdeepanbabu.github.io](http://pdeepanbabu.github.io) |

**Key Expertise**

B.E with 13+ Years of experience in Automation Based Testing and Measurement

* + Expertise in test application development using NI LabVIEW, NI VeriStand and NI Test-Stand
  + Expertise in the test case development for different projects
  + Expertise in developing web app using Django framework
  + Worked in preparations of unit's test plan for different modules of the applications

B.E with 3+ Years of extensive experience as a Full Stack Developer.

* + Expertise in developing IoT based web and mobile applications.
  + Experienced in working with NodeJS and NPM modules.
  + Expertise in developing RESTful Api using Express backend framework.
  + Extensive knowledge in developing SPA (Single Page Application) using React JS.
  + Experience in working with Redux architecture using complex Object-Oriented concepts in improving the performance of websites.
  + Good experience in customizing CSS frameworks like Bootstrap and Antd Design.

**Experience Summary**

* Current Employer: **L&T Technology Services Limited,** Mysore as a **Project Lead** (Test and Test Automation) from June 2016 to till Now.
* Previous Employer: **Soliton Technologies Pvt. Ltd.,** Coimbatore as **Senior Project Engineer** from April 2015 to May 2016
* Previous Employer: **Dynaspede Integrated System Pvt. Ltd.**, Hosur as an **Engineer-Design** from August 2010 to April May 2015

**Educational Qualification**

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| Bachelor’s Degree | Electronics And Communication Engineering, 2010 from Jayaram College of Engineering and Technology, Anna University – 71% |
| Higher Secondary | Little Flower Matriculation Hr. Sec. School., Tirunelveli Town – 70% |
| SSLC | Little Flower Matriculation Hr. Sec. School., Tirunelveli Town – 75% |

**Work Summary**

13+ years of experience in Software development using NI LabVIEW, NI VeriStand, NI Test-Stand, Python and JavaScript

* Experience in PC Based Automation Software Development using NI LabVIEW.
* Experience in Web/Mobile app development using React and React Native.
* Good knowledge of NI products and IoT products.
* Experience in handling NI STS, NI cRIO, NI PXI and NI PCI Interfaces and related Hardware’s.
* Involved in application software architecture design and development
* Involved in troubleshooting issues in coding and hardware.
* Involved in the different stages of project development like design, coding and implementation.
* Good experience in the project development process.
* Effective presentation and communication skills.
* Ability to work in a team environment and independently.
* Proven ability to effectively work independently in a fast-paced environment.

**Skills**

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| **Industrial Automation** | |
| Tools | NI LabVIEW, NI VeriStand, NI Test-Stand, NI (TSM) Test-Stand Semiconductor Module and various NI LabVIEW Toolkits, Siemens PLC and Mitsubishi PLC |
| Protocols | TCP/IP, UDP, RS232, RS422, USB |
| Hardware | NI STS, cRIO, PCI, PXI and related NI and third-party Hardware’s. |
| **Web App** | |
| Domain | Web App Development |
| Technology | Python (Django), HTML, JavaScript (NodeJS, React JS, Preact JS and Next JS) & CSS |
| Protocols | HTTP, TCP/IP |
| IoT Protocol | MQTT, REST & WebSocket's |
| Web Server | Apache & nginx |
| Operating System | Windows, Linux (Ubuntu & Cent OS) |
| **Mobile App** | |
| Domain | Mobile App Development |
| Technology | React Native |
| Protocols | HTTP, TCP/IP, REST & WebSocket's |
| Operating System | Android, iOS |

**Project Details**

**Project 1:**

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| **Project Name** | CT-DAS | **Team Size** | 1 |
| **Start Date** | July 2021 | **End Date** | Till Date |
| **Description** | Developed an Automated Test Realtime based software tool to automate the various functionalities of Coiled Tubing. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2018  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2018, NI cRIO System, NI LVOOPS, NI FPGA and NI Real-time programming | | |

**Project 2:**

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| **Project Name** | SPECTRUM DAS | **Team Size** | 1 |
| **Start Date** | July 2021 | **End Date** | Till Date |
| **Description** | Developed an Automated Test Realtime software tool to automate the data acquisition and visualize the data from different boards to the webpage.  . | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2016  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2018, NI cRIO System, NI LVOOPS, NI Webservice, NI FPGA and NI Real-time programming | | |

**Project 3:**

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| **Project Name** | SMART System | **Team Size** | 2 |
| **Start Date** | July 2017 | **End Date** | Till Date |
| **Description** | Developed an Automated Test tool to test the functional test of PCB’s with/without an Oven. Application is capable of testing 15 different or same PCB in sequentially | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2018  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2016, NI PXI System, NI LVOOPS, NI FPGA, MS SQL, and CAN Communication | | |

**Project 4:**

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| **Project Name** | E-Brakes Actuation Control Unit | **Team Size** | 2 |
| **Start Date** | October 2016 | **End Date** | March 2017 |
| **Description** | To design an Automated Test Software to validate the E-Brake Control Unit Flight software. Simulated a Test case to validate all the digital and analogue sensors present in the control Unit. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2014, NI VeriStand 2014 and NI Test-Stand 2014.  ➢ Implementation of custom devices in VeriStand.  ➢ Implementation of custom steps in Test-Stand and customized process model.  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2014, NI PXI System, NI VeriStand 2014, NI Test-Stand 2014, NI FPGA and CAN Communication | | |

**Project 5:**

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| **Project Name** | Engine Thrust Reverser Actuation Control Unit (ETRAC) | **Team Size** | 2 |
| **Start Date** | August 2016 | **End Date** | October 2016 |
| **Description** | To design an Automated Test Software to validate the Engine Thrust reverser control unit software. Simulated a Test case to validate all the digital and analogue sensors present in the control Unit using AFDX Ethernet communication. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2014 and NI Test-Stand 2014.  ➢ Implementation of custom steps in Test-Stand and customized process model.  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2014, NI PXI System, NI Test-Stand 2014 and AFDX Communication. | | |

**Project 6:**

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| **Project Name** | Actuator Electronic Unit | **Team Size** | 2 |
| **Start Date** | June 2016 | **End Date** | October 2016 |
| **Description** | To Design an Automated Test Software to validate the ‘Actuator Electronic Control unit’ (AEU) present in the flight. The system periodically monitors inputs from the sensors and generates the required events based on the received data. Once it determines a valid situation, the module will deploy the appropriate control activity. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2012 and NI VeriStand 2012.  ➢ Implementation of custom devices in VeriStand.  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2012, NI PXI System, NI VeriStand 2012, NI FPGA and I2C Communication | | |

**Project 7:**

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| **Project Name** | ANC Test - Headphone Audio Codec | **Team Size** | 4 |
| **Start Date** | June 2015 | **End Date** | September 2015 |
| **Description** | To design a test software to generate an audio signal to calibrate various mics present in the headphone and load those the calibration details into OTP (One Time Programmable) Memory of headphone audio codec to test the performance of ANC (Anti-Noise Cancellation). | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2014 and NI Test-Stand 2014.  ➢ Implementation of custom steps in Test-Stand and customized process model.  ➢ Unit testing and System testing.  ➢ User Interface Design  ➢ Testing and Debugging of application  ➢ Communication with Hardware. | | |
| **Tools** | NI LabVIEW 2014, NI PXI System, NI Test-Stand 2014, NI Test-Stand Semiconductor Module, NI FPGA and I2C Communication | | |

**Project 8:**

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| **Project Name** | Transmission Test Bench | **Team Size** | 1 |
| **Start Date** | October 2013 | **End Date** | October 2014 |
| **Description** | To design and develop Test Automation Software to verify the functionality of Transmission at various conditions. It’s fully automated software and it can be able to control up to 9 Servo Motors and 2 Loading Dyno in simultaneous. Servo Motors are used for an AGS (Automatic Gear Shifter) and to couple/decouple the loading Dyno. Dyno is used to apply a Load at the right and left side of the Axle. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Develop the architecture and coding in LabVIEW 2011.  ➢ Verification & Validation of Test Cases.  ➢ Prepare user manual and train the operator at customer site to test product with the developed application. | | |
| **Tools** | NI LabVIEW 2011, NI cRIO and My SQL Database | | |

**Project 9:**

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| **Project Name** | Motor Test Bench | **Team Size** | 1 |
| **Start Date** | January 2012 | **End Date** | November 2013 |
| **Description** | To design and develop Test Automation Equipment to verify the correct functionality of various types of motors like Contra Rotating Motor, Induction Motor, Submersible Motor, Wiper Motor, etc. The motors can be tested under IEEE and IEC Standard. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Code Development in LabVIEW  ➢ Verification & Validation of Test Cases.  ➢ Participate in test plan reviews and Interact with Customers for various reviews. | | |
| **Tools** | NI LabVIEW 2010, NI cRIO System, RS 232 Communication | | |

**Project 10:**

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| **Project Name** | Road Test Simulator | **Team Size** | 1 |
| **Start Date** | August 2011 | **End Date** | December 2011 |
| **Description** | To design and develop Automatic test equipment to simulate 2- wheeler road condition to test various functions like Front Fork Test, Rear Suspension, Brake Test, Mileage Test and Speedo Test. | | |
| **Role &**  **Contribution** | Role: Software Developer  ➢ Requirement Study  ➢ Code Development in LabVIEW  ➢ Development of application architecture.  ➢ Testing and Debugging of application | | |
| **Tools** | NI LabVIEW 2009, NI PXI System, RS232 Communication | | |

**Personal Details**

**Name:** Deepan Babu

**Nationality:** Indian

**D.O.B:** 6th JUL’ 1989

**Sex:** Male

Visa: H1B (Valid till Nov 2025. Can be extended 3 more years)

**Languages:** Tamil, English

**Declaration**

I hereby declare that the above-mentioned information is true to the best of my knowledge.

Place: Hosur Signature Date:

(DEEPAN BABU.P)