

# PUVVALA DURGA BHAVANI

91-7075762309 | durgabhavani923@gmail.com

## Professional Summary

Result-oriented and detail-focused **RF & Microwave Test Engineer** with 3+ years of hands-on experience in testing, validating, and troubleshooting high-frequency systems including transmitters, receivers, filters, and amplifiers. Adept in using advanced RF test instruments such as VNAs, spectrum analyzers, and signal generators. Strong knowledge of RF design and testing protocols like ATP and ESS. Seeking to contribute technical expertise and continuous improvement mindset to a dynamic organization, supporting both personal and company growth.

## Technical Skills

- **RF Testing & Measurement:** Gain, Insertion Loss, Return Loss, Isolation, Phase Noise, Spurious, Harmonics, Compression Point
- **Test Equipment:** Spectrum Analyzer, Network Analyzer (VNA), Signal Generator, Oscilloscope, Power Meter
- **Components Handled:** Isolators, Amplifiers, LNAs, Filters, Circulators, Limiters, RF Switches, Mixers
- **Technologies:** Waveguides, Microstrip & stripline, RF Transmission Lines
- **Testing Methods:** ATP (Acceptance Test Procedure), QTP (Qualification Test Procedure), ESS (Environmental Stress Screening)
- **Other Skills:** Circuit-level troubleshooting, Schematic analysis, Component tuning and replacement, Vivado, FlashPro (FPGA Programming Tool)

## Professional Experience

### RF Technical Assistant

Dec 2021 - Present

Astra Microwave Products Ltd., Hyderabad

- Performed RF testing and validation for transmitters, receivers, amplifiers, and other microwave components.
- Conducted tuning and alignment of high-frequency devices such as cavity and LC filters.
- Utilized VNA, spectrum analyzer, and signal generators for measuring RF parameters.
- Worked extensively on waveguide and stripline-based systems.
- Executed ATP, QTP, and ESS procedures and contributed to documentation.
- Diagnosed and resolved issues at the component level for high-power RF subsystems.

### Technical Trainee

Mar 2020 - Nov 2021

Hindustan Aeronautics Limited (HAL)

- Designed HF Receiver Test Jig PCBs using KiCAD and EasyEDA tools.
- Assisted in **PCB layout design, component placement, and signal routing** for indigenized systems.

### Industrial Trainee

Nov 2018 - May 2019

Sky Quad Electronics Pvt. Ltd.

- Trained in **soldering, desoldering, and component-level assembly** of electronic circuits.

- Learned electronic component identification, handling, and placement techniques.

## Key Projects

- **Command Guidance Unit - BDL, Hyderabad**

Designed and tested X-band upconverter and C-band transmitters for radar communication systems.

- **Upconverter Module - BEL, Ghaziabad**

Worked on Upconverter module of Alesha Central Unit, generating and upconverting UHF Stalo/DDS signals (540 MHz → 3.1–3.5 GHz) with band division and amplification to 1 dBm output.

- **Central Unit Rack - BEL, Ghaziabad**

Supported integration of core RF subsystems including excitors, signal processors, and upconverter.

- **Weapon Level Radar (WLR) - BEL, Bangalore**

Configured upconverter and optimized phased-array LNA-based front ends.

- **AGR (Array Group Of Receiver) - LRDE, Ghaziabad**

Supported testing of 16-channel RF receiver with analog/digital down-conversion and FPGA-based signal routing.

- **DTRM ( DUAL TRANSMIT RECEIVE MODULE )-BEL, Ghaziabad**

DTRM is one of the LRU unit of radar systems. That integrates the core RF RX/TX functions. It consists of two identical TRMS

## Education

- |   |             |
|---|-------------|
| • <b>Diploma in Electronics &amp; Communication Engineering (SBTET)</b> | <b>2019</b> |
| Anurag College Of Engineering ,Telangana                                | 88.70%      |
| • <b>Secondary School Certificate (S.S.C.)</b>                          | <b>2016</b> |
| St. Mary's Grammar High School, Telangana                               | 8.8         |

## Soft skills

- Handy in different types of testing, evaluation and reporting software's
- Proficient in MS word, excel and other MS office tools

## Areas of Interest

- Wireless Communication Systems
- RF & Microwave Engineering
- RF Test Automation and Data Logging

## Personal Information

Date of Birth: 23 September 2000

Languages Known: Telugu, English, Hindi

## Declaration

I hereby declare that the information provided above is true and accurate to the best of my knowledge.

**PLACE:**Hyderabad

**(PUVVALA DURGABHAVANI)**

**DATE:**