BIMAL VINOD

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Objective

To be a part of a project where I can use my skills as well as learn new things.

Education

Course / college	Board/University& year	Percentage of marks
M-tech , Communications and Signal processing	**IIT Madras** (2015-2017)	**CGPA 7.97 (after 3 semesters)**
B-Tech , ELECTRONICS AND COMMUNICATION ENGINEERING, MODEL ENGINEERING COLLEGE, Kochi,Kerala.	**Cochin university** of science and Technology,**2007**	**80.3 %**
Plus 2 ,MTHSS, Kaloor, Kochi	HSE,2003	**92.5 %**
SSLC ,MTHSS, Kaloor, Kochi	THSLC,2001	**89.3 %**

Software Skills

- Hardware design tools :Xilinx ISE ,MATLAB Simulink ,Xilinx System generator, iverilog , OrCad
- Software languages : C , C++ ,
- HDL languages : Familiar with VHDL and Verilog , python
- Simulation tools : Matlab ,CST Studio Suite

Industry Experience

Company	Designation	Platform	period
GDA Technologies(An L & T InfoTech Company)	System Engineer	Embedded s/ms, (PowerPC based)	Aug 2007 to Nov 2008 (1 year 4 months)
Aircraft R & D Centre, Hindustan Aeronautics Ltd. (HAL)	Deputy Manager (Avionics design)	Hardware designing, system Integration and testing of Avionics Units	Dec 2008 to present (7 years 3 months)

Research/development experiences

✓ **Dec 2011 to present: Aircraft Research And Design Centre, Hindustan Aeronautics Ltd , Bangalore**

Design Engineer

- *Designed and developed Multiple Remote Terminals (Multi-RTs) simulation software using C++.* This software has helped in the simulation of various avionics systems, required for the software evaluation of Digital Flight Control Computer of a fighter aircraft. Hands on experience with MIL-STD 1553.
- Designed and simulated a rectangular patch antenna at GPS frequency using an antenna development software(CST Studio Suite).
- Currently involved in the design and development of a prototype system which monitors the Foreign Object Debris (FOD) ingestion into the engine air intake duct of an aircraft. The system *detects and classifies the ingested FODs* into damaging and non-damaging

✓ **Dec 2008 to Nov 2011: Avionics Division, Hindustan Aeronautics Ltd, Hyderabad**

Design Engineer: Hardware digital design, development and testing

- ***Designed and developed the DSP card*** for a short range FMCW radar unit.
  - The main hardware components used in the card were, two 14 bit ADCs, one Virtex-4 FPGA and an 8- bit DAC .The interface used for communicating was RS422.
  - Guided the layout engineer in the placement and routing of the 12 layer DSP board and co-ordinated the process of assembling the card using automatic pick and place ,reflow machine.(Used OrCad Capture for the schematic design and Cadstar for the PCB layout design).
- Designed and implemented a ***matched filter*** module in FPGA(Virtex-4) which was used in the signal processing software for the Radar. Used *Xilinx's 'ISE tool' and 'System Generator'* for the code development. The top module was coded in VHDL**.**
- Responsible for the integration and testing of the complete radar unit as per the MIL standards.

ACADEMIC ACHIEVEMENTS:

✪ **5TH** Rank in the XIITH State Board Exam.

✪ Passed with distinction in all semesters of B-tech.

✪ Was a member of the technical team which won the "Best Stall" award in Excel-2k5 and Excel-2k6, the technical fest organized by Model Engineering College.