

MUHAMMAD MAHBOOB UR REHMAN

ASIC Design Verification Engineer | Gold Medalist

@ contact@mahbooburrehman.com
mahbooburrehman.com

@ chudrymahboob@gmail.com
mahboob-ur-rehman

+1 669 649 1073
San Jose, CA, USA



EXPERIENCE

Hardware Engineer

DreamBig Semiconductor Inc

Jan 2024 – Present San Jose, CA, US

- Full chip verification of Ethernet chiplet and virtual PCIe switch
- Verification of enumeration flow of PCIe switch
- Full chip test planing and execution
- Delegate tasks to team members
- Collaboration with international teams

Hardware Engineer

DreamBig Semiconductor Inc

Feb 2021 – Jan 2024 Islamabad, Pakistan

- ASIC design verification using Universal Verification Methodology (UVM)
- Created UVM based verification environment for 800G Ethernet MAC
- Testing, debugging and integration of various IP and VIP blocks
- Python scripting for automating tasks
- Hands-on experience of simulation tools including Questa, VCS, Xcelium
- Proficient understanding of Git version control software and Jira tool for agile project management

Design Engineer

NexTek Service

Sept 2018 – Dec 2020 Islamabad, Pakistan

- Experience in research and development, repairing and reverse engineering of electrical / electronics projects for military industry
- Development of Avionics Testers/Stimulators (TACAN, IFF, ILS, INS, BAU)
- Worked on communication protocols: ARINC-429, RS-422 / 485, RS-232
- Proficiency in using Oscilloscope, Signal Generator, Digital Multi-Meter

TRAININGS & CERTIFICATIONS

- **DVCON 2025** (Presented on topic of AFCML: Accelerating the Functional Coverage through Machine Learning within a UVM Framework) San Jose, CA - Feb, 2025
- **2022 CHIP-DV Workshop** (Trainer) GIKI University- Nov, 2022
- **Chip Design Verification Essentials** (Trainer) SINES, NUST University - Aug, 2022
- **Neural Networks and Deep Learning** Coursera - Mar, 2019
- **Digital Image Processing Workshop** IEEE, Bahria University - Feb, 2017
- **Automation and Control Systems Seminar** IEEE, Bahria University - Sept, 2016

EDUCATION

Bachelor of Electrical Engineering (Electronics)

CGPA: 3.94/4.00

Bahria University

2014 - 2018 Islamabad, Pakistan

ACHIEVEMENTS



Gold Medal

Gold medalist of Electrical Engineering Graduating Batch 2014-2018 Bahria University



Rector Honor List

Enrolled in Bahria University's Rector Honor List and achieved merit scholarship



Ex. Director Technical Events

Served IEEE Student Branch, Bahria University, Islamabad as a member of organizing team in various technical and non-technical events

SOFTWARE & HARDWARE TOOLS

- Questa, VCS, Xcelium, Xilinx ISE, ModelSim, LabVIEW, OrCAD, MATLAB, GMWIN, Visual Studio, Auto-CAD, Proteus, Packet Tracer, VC707 FPGA Kit, FPGAs, NI USRP RIO, NI PXI Chassis/Cards, GLOFA GM-4 PLC, Microcontroller 89C51
- Programming Languages: Verilog/System Verilog, Python, LabVIEW Graphical Programming, Ladder, Assembly, C++, C#

SKILLS

Communication

Team Player

Leader

Time Management

Problem Solver

Quick Learner

REFEREE

Obaid Khalid

Director of Engineering

@ obaid@dreambigsemi.com

Dreambig Semiconductor, Pakistan

+92 333 3883198