

NELLIMUKKU HEMANTH KUMAR

The logo for ChipEdge, featuring the word "ChipEdge" in a white, sans-serif font on a blue rectangular background.

CAREER OBJECTIVE

- To obtain a position that challenges me and provides me the opportunity to reach my full potential professionally and personally utilizing my abilities and years of experience in your organization that is progressive intellectually and technically and one in which practices collaborative leadership, integrity and honesty.

EDUCATION

VIGNAN'S INSTITUTE OF INFORMATION TECHNOLOGY
B.TECH | JAWAHARLAL NEHRU TECHNOLOGICAL
UNIVERSITY OF KAKINADA

- Electronics and Communication Engineering
- cgpa - 7.01
- 2016 - 2020

SRI CHAITANYA JUNIOR COLLEGE
INTERMEDIATE
STATE BOARD

- MPC
- cgpa - 7.02
- 2014 - 2016

SRI CHAITANYA TECHNO SCHOOL
10TH CLASS
SSC

- cgpa - 9.8
- 2013 - 2014

CONTACT INFORMATION

- **Location :** Visakhapatnam, Andhra Pradesh
- **Phone No :** 9866464803
- **Linked Id :**
<https://www.linkedin.com/in/hemant-h-kumar-015055218>
- **Email Id :** nhemanth305@gmail.com

HOBBIES

- Playing Batminton
- Gymming
- Sketching

OTHER ACTIVITIES

- Participated in 4G and 5G workshop
- Participated in Cyber Security internship

ACHIEVEMENT

- 10th class prathibha award in 2015

LANGUAGES

- Telugu
- Hindi
- English

WORK EXPERIENCE

- Design Verification trainee from feb 2021 to oct 2021 in Maven silicon.
- Worked as Design Verification engineer from nov 2021 to feb 2022 in Excel Vlsi Technologies.
- physical design course trained in chipedge from march 2022 to august 2022.
- physical design trainee from oct 2022 to till now in edigim semiconductor

PROFESSIONAL TRAINING

- Physical Design training from ChipEdge Technologies Pvt. Ltd, Bangalore, using Synopsys IC Compiler.
- **COURSE OUTLINE:** VLSI Fundamentals, CMOS Basics, Floor Planning, PowerPlanning, Placement, Clock Tree Synthesis, Routing, Timing analysis and Optimization, Physical Verification and ECO flow.
- **Tools Used in training:** IC-Compiler, IC Validator, StarRc, Prime Time

TECHNICAL SKILLS

- **Hardware Description Language :** VHDL, Verilog, System verilog, UVM. (Proficiency level : Beginner).
- **EDA Tools:** ICC Compiler Synopsys (Proficiency level : Beginner).
- **Other Tools:** Xilinx, Modelsim, Matlab.
- **Scripting Language:** TCL.
- **Operating System:** Windows, Linux.

VLSI PROJECTS

Project 1 : CHIPTOP

- **Technology/ Metal Layers :** 14nm / 9 Metal layers
- **Macros :** 4
- **Standard Cells :** 6108
- **No. of Clock 1 Frequency :** 1200MHz
- **Tools Used :** IC-Compiler, IC Validator Role Design-Import, Sanity checks, Floor Plan, Power Plan, Placement, Timing Optimization, CTS, Routing, Timing Analysis & Closure, LVS & DRC.

COLLEGE SKILLS

Tools used in Engineering :

- MATLAB – Digital Image Processing
- XILINX SOFTWARE – Digital IC Applications
- PYXIS SOFTWARE – Very Large Scale IC.

Subject Expertise :

- Digital electronics, Analog electronic, Network analysis.

Project 2 : DTMF

- Technology / Metal Layers : 28nm / 9 Metal layers
- Macros : 6
- Standard Cells : 5211
- No. of Clock 3 Frequency : 277MHz, 277MHz, 116.2MHz
- Tools Used : IC-Compiler, IC Validator Role Design-Import, Sanity checks, Floor Plan, Power Plan, Placement, Timing Optimization, CTS, Routing, Timing Analysis& Closure, LVS &DRC.

Project 3 : JBI

- Technology / Metal Layers : 28nm / 9 Metal layers
- Macros : 46
- Standard Cells : 47938
- No. of Clock 3 Frequency : 0.263 GHz
- Tools Used : IC-Compiler, IC Validator Role Design-Import, Sanity checks, Floor Plan, Power Plan, Placement, Timing Optimization, CTS, Routing, Timing Analysis& Closure, LVS &DRC.

ACADEMIC PROJECT

IMAGE HAZE REMOVAL IN DARK CHANNEL PRIOR

- Generally haze is formed due to combination of attenuation and these attenuation reduce the image contrast and increases the whiteness in image.
- Haze is something such as heat,fog,smoke in the air that makes it less clear,so that it is difficult to see the image well.
- The DCP is derived from the characteristic of outdoor images that the intensity value of at least one color channel within a local window is close to zero.
- Based on the DCP, the dehazing is accomplished through four major steps:atmospheric light estimation, transmission map estimation, transmission map refinement, and image reconstruction.

DECLARATION

- I here by declare you that the below written information is true to best of my knoweledge.

DATE –

PLACE – VISAKHAPATNAM

Signature
N.HEMANTH KUMAR