KEVIN PRAKASH

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OBJECTIVE

Reliable and resourceful verification engineer seeking a challenging role to hone my skills. Bringing new ideas to the organisation while expanding my thinking. With a deep passion for developing innovative solutions for complex engineering problems. Focus on collaborative problem solving to enhance team productivity.

WORK EXPERIENCE

Synopsys Inc, Bangalore [5 Years]	Jan 2020 - Present
ASIC Digital Design, Staff Engineer	Jan 2024
ASIC Digital Design, Engineer II	Nov~2021
ASIC Digital Design, Engineer I	Nov~2020
$Intern(Technical\ Engineer)$	Jan 2020

USB IP

- · Planning and development of EUSB2V2 features.
- · Handled porting of VMM testbench to UVM methodology.
- · Implemented logic for data throughput testing of USB 3.X controller.
- · Developing and verifying latest xHCI feature.
- · Enhancing AXI implementation to handle delay modelling.
- · Adapting to latest internal methodology to maintain compliance with latest industry standards.
- · Integrated AI feature to improve functional coverage closure time.
- · Writing and maintaining scripts across the IP.
- · Created functional coverage and assertions for testing the design.
- · Worked on updating the RTL codebase to the latest methodology in terms of LINT, CDC and RDC.

EDUCATION

M.Tech Microelectronics (ME) BITS (Autonomous), Pilani	August 2022 - May 2024 CGPA : 8.05
B.E. Electronics and Communication (ECE) BMS College of Engineering(Autonomous), Bangalore	August 2016 - May 2020 CGPA : 8.84
KPUC Physics Chemistry Math Electronics (PCME) CMR Pre University College, Bangalore	July 2014 - June 2016 Overall Percentage: 85.5
CBSE 10th Standard SJR Public School, Bangalore	June 2006 - July 2014 CGPA: 9.4

PROJECTS

Central Regression

Created a website to record all the regression details across all USB IPs. This provides a one point access to latest information with the ability to sort records based on various parameters. Created redundancies to retrieve database incase of failure. Was able to improve the teams productivity

V.I.E.W- Visual Interpreter of Environment Wizard

Created a device that is capable of assisting the visually impaired in their day to day task using Machine Learning. Provides assistance in reading text, describing environment, navigation using maps. Using a Resnet 50, a CNN model was trained that could run fast and accurately on a low power device such as RPi. The user is given the option to provide voice input to activate these features. [Code]

Module replacer

Script to replace a given module with a new module while mapping the signals based on user input provided across the entire design.

Result Parser

Tools to quickly analyse FC results and generate a HTML page for easy accessibility

ML Workshop

Conducted Workshop and Competition on Image Classification as a part of UTSAV (BMSCE Cultural Fest). Contestants were taught the concepts of CNN and then had to create a CNN model with high accuracy

[Website]

TECHNICAL STRENGTHS

Programming System Verilog, VHDL, C++, Python, Shell, Perl, TCL, Assembly C,

HTML, CSS, JS

Methodologies UVM, VMM

Software & Tools VCS, Verdi, Spyglass, MS Office, LATEX

CERTIFICATIONS

Verification of methodology with System Verilog and UVM (Verikwest)

Machine Learning by Stanford University (Andrew Ng):

Computer Vision (The School of AI)

[Certificate]

[Certificate]

Matlab Certification from BMSCE