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Certificate

This is to certify that the University Mini Project titled **"SMART SHOE FOR VISUALLY IMPAIRED PERSON: OBJECT DETECTION,OBJECT VISUALIZATION USING OPENCV"** was carried out by SHAGUFTA AND 20202ESV0005 who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

Ms. Akshaya M Ganorkar
Assistant Professor
Department of Electronics and
Communication Engineering

Dr. Rajiv Ranjan Singh
Professor and Head of
Department of Electronics and
Communication Engineering

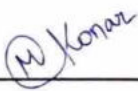Examiner-1 _____

Examiner-2 _____

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This is to certify that the University Mini Project titled **"FPGA IMPLEMENTATION OF IMAGE DE-NOISING USING WAVELETS"** was carried out by DIVYA D (20202ESV0007) who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

DR. K BHANU REKHA
Assistant Professor
Department of Electronics and
Communication Engineering

DR. RAJIV RANJAN SINGH
Professor and Head of
Department of Electronics and
Communication Engineering

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This is to certify that the University Mini Project titled **"Application of Deep Learning for Object Detection"**was carried out by STUDENT NAME **DEOBRA**   AND ID **20202ESV0001** who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.
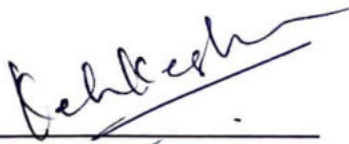
GUIDE NAME : Mr Tirumala Vasu G
Assistant Professor
Department of Electronics and
Communication Engineering

HOD
Professor and Head of
Department of Electronics and
Communication Engineering

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Examiner-2 _____

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This is to certify that the University Mini Project titled **"Implementation of Parallel Prefix High Speed Adder"** was carried out by Hareef D and 20202ESV0002 who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

Mrs.SriLakshmi K H

Assistant Professor

Department of Electronics and
Communication Engineering

Dr. Rajiv Ranjan Singh

Professor and Head of

Department of Electronics and
Communication Engineering

Examiner-1 _____

Examiner-2 _____

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December, 2021

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This is to certify that the University Mini Project titled **"Design of high-performance**

approximate multipliers using stochastic computing for real time signal processing system"

was carried out by K Naveen (ID No. 20202ESV0004) who is a bonafide student III Semester

M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the

course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

Anupama Sindgi
Assistant Professor
Department of Electronics and
Communication Engineering

HOD
Professor and Head of
Department of Electronics and
Communication Engineering

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This is to certify that the University Mini Project titled **"Smart shoe for physically disabled people"** was carried out by Teju N(ID No. 20202ESV0003) who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

Dr K Bhanu Rekha
Assistant Professor
Department of Electronics and
Communication Engineering

HOD
Professor and Head of
Department of Electronics and
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This is to certify that the University Mini Project titled **"IOT BASED SMART WATER-BOTTLE HOLDER USING LOAD CELL AND ARDUINO"** was carried out by Ms. FAIZA TASNEEM (ID No. 20202ESV0006) who is a bonafide student III Semester M.Tech, Embedded Systems and VLSI in Presidency University. This is in partial fulfilment of the course work for Master of Technology in Presidency University, Bengaluru, during the year 2021.

Dr Aravind Kumar
Assistant Professor
Department of Electronics and
Communication Engineering

HOD
Professor and Head of
Department of Electronics and
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