



# One day workshop on "Advanced Parallel processing"

Organized by  
Department of Information Technology and Computer Science and Engineering  
Walchand College of Engineering Sangli

## About WCE, Sangli

Walchand College of Engineering (WCE) is situated midway of Sangli Miraj road. In 1947, the college made a modest beginning as New Engineering College. In the year 1955, the College was renamed as Walchand College of Engineering as part of the arrangements and pursuant to the rehabilitation and development program, mainly funded by Seth Walchand Hirachand Memorial Trust (WHMT) and the Government. The College became autonomous institute during the year 2007. The college has total intake of 430 UG students for six branches and 240 PG students for ten branches. As a part of strategic planning, research and development activities are being further strengthened. The college has been recognized for running Ph.D programme under Quality Improvement Program (QIP) scheme by AICTE.

## About CSE and IT Departments

The CSE department has been established in the year 1986 with the introduction of undergraduate programme in Computer Science and Engineering. Later on, the IT department has been started in the year 2001. These programmes focus on areas such as Theoretical Computer Science, Database Engineering, Software Engineering, Operating Systems and Computer Networking, Internet of Things. Course contents of these programmes are up-to-date and are in-line with the current trends of the Computer and IT Industry. These programmes attract meritorious students every year at the entry level for both UG and PG level.



visit us at  
<http://www.rsc.wce.ac.in>

## On 17th February 2018

### Under Activity of TEQIP-III

## Experts from Industry & Academia

Mr. Dwijay Bane  
Mr. Bhavin R. Darji

(Edutech Learning Solutions Pvt. Ltd.)

## Brief Agenda

- GPU Concepts and Applications
  - What is GPGPU ? (General Purpose GPU)
  - What is CUDA ?
  - What is OpenGL/GLES ?
  - What is OpenCV ?
  - What is OpenVX ?
  - OpenCV vs OpenVX
  - Nsight Studio IDE
  - Graphics Debugger IDE
- Hands-on activity
  - GPU Embedded board setup with Host setup
  - \* Ethernet connection
  - CUDA Examples
  - \* Process of Creating and debugging using Nsight studio
  - \* examples using matrix multiplication/Device Query etc
  - \* examples for Graphics Category (particles/smoke/nbody/etc)
  - \* examples for Library section to show use of Cuda Libraries (cuDNN, cuBLAS, cuFFT, etc)
  - Graphics Rendering Examples using OpenGL
  - \* use of Graphics Debugger to work with OpenGL

- Image/Video Processing using OpenCV
- \* Camera examples
- \* Image/Video example
- Image/Video Processing using OpenVX
- \* VisionWorks examples
- \* Camera examples
- Deep Learning Inference Examples
- \* Basic Image Classification
- \* Object Detection using Bounding Box (FCN- Fully Convolution Neural Net)
- \* Image segmentation (Semantic Segmentation)
- \* If possible live inference using Camera of any example

## Registration Fee:

Free Entries for participants in WCE, Sangli & JEC, Jabalpur;  
Others: Rs.300/-

## Registration Link:

<https://goo.gl/forms/C8LmZKzEDb61e1Fl1>

## Patron

Dr. G. V. Parishwad  
Director, WCE sangli

## ORGANIZING COMMITTEE

Dr. D. B. KULKARNI Registrar, WCE Sangli	Dr. Mrs. S. P. Sonawane Associate Professor in IT and I/C Head IT Department
DR. B. F. MOMIN Associate Professor in CSE and I/C Head CSE Dept.	Prof. U. B. Chavan Assistant Professor, IT Department
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