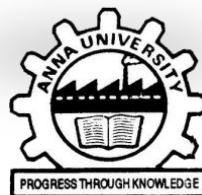


UPE workshop-Product Development and Commercialization using MATLAB

On

5th August 2019



Coordinated by

Dr. S. Shenbaga Devi, Director, Centre for Medical Electronics

Dr.S. Nirmala Devi, Professor, Dept.ECE

Dr. T.Jayasree, Asst. Professor, Dept.ECE

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Report on UPE workshop-Product Development and Commercialization using MATLAB

Under the guidance of the University with Potential for Excellence (UPE), Anna University, a one day workshop on UPE workshop-Product Development and Commercialization using MATLAB in association with Design tech, Bengaluru, has been conducted on 5th August 2019 for the benefits of faculty members, research scholars and UPE project staff members of Anna University. The workshop was conducted by the UPE - Optoelectronics and Medical Imaging team consisting of Dr. S. Shenbaga Devi, Director, Centre for Medical Electronics, Dr. S. Nirmala Devi, Professor, Department of ECE & Dr. T.Jayasree, Assistant Professor Department of ECE. Around 30 participants were benefited from the workshop.

The workshop was inaugurated by Dr. S. Shenbaga Devi, Director, Centre for Medical Electronics and special address was given by the expert member Mr. Rajkumar .D, Application Engineer, MathWorks , DesignTech Systems Ltd. The afternoon session was handled by Mr. RajKumar D focussing on web based learning methodology and app development using MATLAB.

Agenda for the Workshop

Department of Electronics and Communication Engineering
College of Engineering, Guindy
Anna University
Product Development and Commercialization using MATLAB

ARTIFICIAL INTELLIGENCE AND IMAGE PROCESSING USING MATLAB & Simulink

Date: 05.08.2019 (Monday)

Time: 09:30 AM to 4:30 PM

| Time | Agenda |
|---|---|
| 09:30 A.M. to 01:00 P.M. | <i>Developing and deploying Machine Learning Algorithm</i> |
| | ➤ Prepare data for training Machine Learning Model. |
| | ➤ Generate and evaluate the trained model using ML. |
| | ➤ Deploy & run the model in Smartphone. |
| | ➤ Load and process big data with MATLAB. |
| | <i>Deep Learning Applications: Challenges and Solutions</i> |
| | ➤ Building deep learning applications such as object detection, semantic segmentation, signal classification. |
| | ➤ Manage extremely large datasets (images, videos, time-series, and text). |
| | ➤ Accelerate and automate the labelling process using apps. |
| | ➤ Deploying deep learning applications using automatic code generation. |
| | <i>Image Processing and Computer Vision with MATLAB</i> |
| | ➤ Apps for Exploration and Pre-processing. |
| | ➤ Object Detection, including deep learning techniques. |
| ➤ 3D Volume Visualization and Segmentation. | |
| 01:00 P.M. to 02:00 P.M. | <i>Lunch Break</i> |
| 02:00 P.M. to 04:15 P.M. | <i>Hands-on session (Deep Learning Onramp)</i> |
| | 1. Introduction - Deep Learning Concept |
| | 2. Using Pretrained Networks - classifications using a network (CNN Architecture) |
| | 3. Managing Collections of Data - classifications using a network (Datastores) |
| | 4. Performing Transfer Learning - Modify a pretrained network to classify images into specified classes |
| 5. Conclusion | |
| 04:15 P.M. to 04:30 P.M. | <i>Developing and Deploying Analytics for IoT Systems using Matlab and Simulink</i> |

Approval Letter

From

02.08.2019

Dr.T.Jayasree,
Assistant Professor,
Department of ECE,
CEG,
Anna University
Chennai- 600025.

To

The Head of the Department,
Department of ECE,
CEG,
Anna University
Chennai- 600025.

Respected Sir,

Sub: - 1. Utilization of Mini Auditorium for workshop on 05.08.2019

2. Utilization of furniture from Medical Electronics Lab-Req-Reg

This is for your kind information that 'UPE workshop-Product Development and Commercialization using MATLAB' is scheduled on 05.08.2019 in the Department of ECE for 30 participants. We kindly request you to give necessary permission to use the MINI Auditorium for the forenoon session. The Afternoon session is scheduled in Optoelectronics and Medical Imaging Lab, since there are 30 participants we kindly request you to give necessary permission to use some furniture's from the Medical Electronics lab.

(A)

Thanking You

Yours faithfully



T.JAYASREE

(A) *mmcl*
hs
2/8/19

Request letter to RCC for web support

From

03.08.2019

Dr.T.Jayasree,
Assistant Professor,
Department of ECE,
CEG,
Anna University
Chennai- 600025.

To

The Director,
Ramanujan Computer Centre,
Anna University,
Chennai-600 025.

Through Proper Channel


Respected Sir,

Sub: Web portal open for workshop-Req -Reg

This is for your kind information that "UPIE workshop-Product Development and Commercialization using MATLAB" is scheduled on 05.08.2019 in Optoelectronics and Medical Imaging lab, Department of ECE. In this connection the hands-on session is conducted through online from the link <https://in.mathworks.com/learn/tutorials/deep-learning-onramp.html> . We kindly request you to make necessary arrangement to view this link for our workshop.

Thanking You

FORWARDED


10/8/19
Dept. of ECE
College of Engineering,
Anna University, Chennai - 25

Yours faithfully



T.JAYASREE

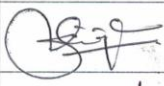
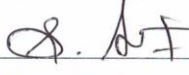




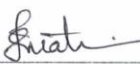
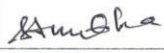





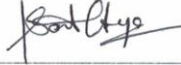
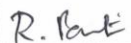
Attendance List

UPE workshop

Product Development and Commercialization using MATLAB

05.08.2019

ATTENDANCE LIST

| S.No | Name of the Faculty | Institution Name | Signature |
|------|-----------------------|---|---|
| 1. | RUBIN BOSE | Research Scholar/ Madras Institute of Technology |  |
| 2. | S. ANANDH | UPE - TA Dept of Medical Physics |  |
| 3. | P. Udaya Prasad | JRF / ECE |  |
| 4. | Sophia Rachel Diamond | CEG - M.E Student |  |
| 5. | T. OORMILA | CEG - M.E. Student |  |
| 6. | BINDHU A | CEG / RS, ECE |  |
| 7. | J. SUMATHI. | Research Scholar / MIT-campus. |  |
| 8. | S. ANUBHA PEARLINE | Research Scholar / MIT Campus |  |
| 9. | S. Saravani Kumar | TA |  |
| 10. | Ezhil Venkatesh. K | TA |  |
| 11. | Santhosh A.R | TA |  |
| 12. | VENKATESH K | TA |  |
| 13. | S. PURNIMA | Research scholar/ CEG campus |  |
| 14. | Saranya S | TF / ECE. |  |
| 15. | R. Prameshwari | TF/ECE |  |

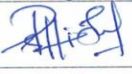
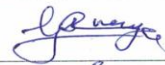





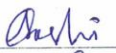

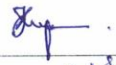


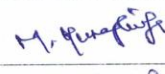
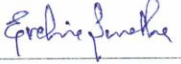

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UPE workshop

Product Development and Commercialization using MATLAB

05.08.2019

ATTENDANCE LIST




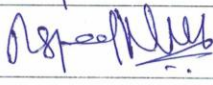



| S.No | Name of the Faculty | Institution Name | Signature |
|------|---------------------|---|---|
| 16 | P. Steffi Snow | PF / ECE |  |
| 17 | V. N. GNANA SURYA | Student / M.E (Medical Electronics) |  |
| 18 | A. ABISHEK | STUDENT - H. E. BIOMEDICAL ENGG. |  |
| 19 | R. Priya dharshini | STUDENT - ME / Biomedical Engineering |  |
| 20 | S. Abiranni | Student - ME / Biomedical Engineering |  |
| 21 | Ajvinram P | Student - M.E / Biomedical Engineering |  |
| 22 | Shreemathi. R | Student - M.E / Biomedical Engg. |  |
| 23 | Sashi Kumar | Student - M.E / Biomedical Engg. |  |
| 24 | Nandhu Bhavani | Student - M.E / Biomedical Engg. |  |
| 25 | Kavya. G.S. | Student - M.E / Biomedical Engg. |  |
| 26 | Elizabeth Helen. J | Student - M.E / Biomedical Engg. |  |
| 27 | Karlya. V. B | Student - M.E. - Biomedical Engineering |  |
| 28 | Gurapriya. M | student - M.E. Biomedical Engineering |  |
| 29 | Eveline Scuethe. S | Student - M.E Biomedical Engineering |  |
| 30 | Jesila | student - M.E Biomedical Engineering |  |

UPE workshop

Product Development and Commercialization using MATLAB

05.08.2019

ATTENDANCE LIST

| S.No | Name of the Faculty | Institution Name | Signature |
|------|----------------------|-------------------------------------|---|
| 31. | S. Preetha | student - ME - MEDICAL ELECTRONICS |  |
| 32 | N. Lakshmi | student - ME Biomedical Engineering | Lakshmi. |
| 33. | Nireetha.D | Student - ME Biomedical Engineering | Nithe |
| 34. | Mahalakshmi.N | student - ME Biomedical Engineering | N.mahalakshmi. |
| 35. | MANISHA.R | Student - ME Biomedical Engineering |  |
| 36 | SOUNDARYA. | student - ME - MEDICAL ELECTRONICS |  |
| 37 | SYED MUSTHAFA | Student - M.E - MEDICAL ELECTRONICS |  |
| 38✓ | NISHA SHAJIL | Research scholar - ECE |  |
| 39✓ | A. Janani | RS - ECE |  |
| 40✓ | J. Angelin Jeba | RS - ECE |  |
| 41 | DNYABHARATHI.T | STUDENT - ME BIOMEDICAL ENGINEERING | T. Dnyabharathy |
| 42. | A. Christy Precilla | student - Medical Electronics. | A. Christy Precilla |
| 43. | BINDHUJA JEMI BHARAT | STUDENT - ME BIOMEDICAL ENGINEERING | Bindhuja JB |
| 44. | M.SAMEERA FATHIMAL | STUDENT - M.E (MEDICAL ELECTRONICS) | M. Sameera Fathimal |
| 45✓ | C. KRISHNAKUMARI | TF - ECE | C. Krish |



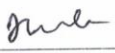


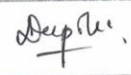
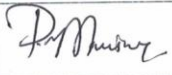







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UPE workshop

Product Development and Commercialization using MATLAB

05.08.2019

ATTENDANCE LIST

| S.No | Name of the Faculty | Institution Name | Signature |
|------|---------------------|-------------------------------------|---|
| 46. | P. SUGANTHI | Student - H.E / Medical electronics |  |
| 47. | Abinaya Sundari R | RS - ECE |  |
| 48. | Heera | ME (Medical electronics) |  |
| 49. | Nivetha AS | M.E (medical electronics) |  |
| 50. | Sueeba R | H.E (Medical electronics) |  |
| 51. | R.S. Deepika Devi. | M.E (Medical electronics). |  |
| 52. | P. Manimegalai | M.E (Medical electronics) |  |
| 53. | M. Anandakumar | ME (Medical electronics) |  |
| 54. | P. Anusuya devi | ME (Medical Electronics) |  |
| 55. | M. MOHANAVALLI | ME [MEDICAL ELECTRONICS] | M. Mohanavalli |
| 56. | Jessie | ME (Biomedical Engineering) |  |
| 57. | Dinetha Kabs | ME (Biomedical Engineering) |  |
| 58. | J. Sheeba Monisha | ME (Medical Electronics) |  |
| 59. | Chitra M. Das | ME (Medical electronics) |  |
| 60. | RAMAPRABHA R | RS. COMMUNICATION SYSTEMS |  |

Feedback form

UPE ONE DAY WORKSHOP

PRODUCT DEVELOPMENT AND COMMERCIALIZATION USING MATLAB

(5th AUGUST 2019)

UNDER THE AEGIS OF UGC-UPE PROJECT, ANNA UNIVERSITY

Workshop evaluation form

1. Did the workshop achieve the programme objectives?

Yes

No

2. Was the overall flow of the workshop well structured?

Yes

No

3. Knowledge and information gained from participation in this workshop

Met your expectations

Yes

No

Will be useful / applicable in my work

Yes

No

4. Was the level of information provided appropriate?

Yes

No

5. Comments and suggestions (including activities or initiatives you think will be useful, for the future)

Found the workshop very useful. I didn't know there were many apps available in Matlab. The handon ~~case~~ ^{course} was useful too.
Thanks for the workshop.

Thank you

Signature:



Name and Address:

NIJISHA SHAJIL
Research Scholar
Dept. of ECE
Anna University

Progress Report



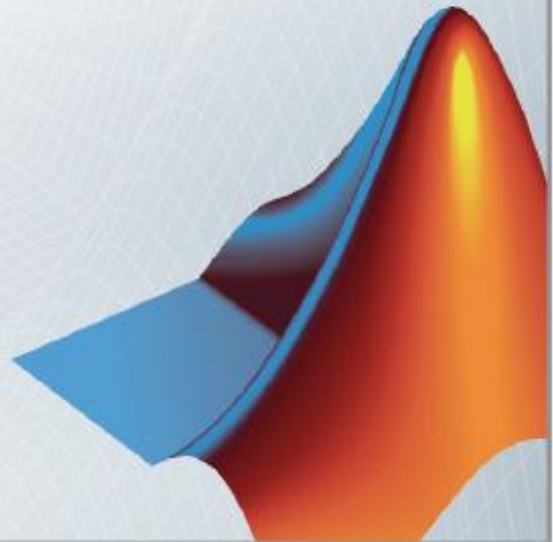
Progress Report

Name: JANANI A
Course: Deep Learning Onramp
Progress: 100% complete (as of 03-Aug-2019)

Chapters

1. Introduction 100%
2. Using Pretrained Networks 100%
3. Managing Collections of Data 100%
4. Performing Transfer Learning 100%
5. Conclusion 100%

Release: R2019a / Language: English



Certificate

 MathWorks | Training Services

JANANI A

has successfully completed

100%

of the

Deep Learning Onramp

self-paced training course

05-Aug-2019

