


## CERTIFICATE

This is to certify that **Mrs. S.V.DEVI GAYADRI**,  
Studying II year ME – Mechatronics at Thiagarajar College of  
Engineering, Madurai, has successfully completed the  
**INTERNSHIP** in our company from 21.1.2018 to 25.4.2018.

For Unique Industrial Automation Private Ltd.



H.   
Managing Director  
27/4/18

**UNIQUE INDUSTRIAL AUTOMATION PRIVATE LTD**

"KUMARAN TOWERS" 58-B, T.P.K. Main Road, (Opp. to Alagappan Nagar Railway Gate),  
Palanganatham, Madurai - 625 003. Phone: 0452 2374777, Mobile : 7358426060

E-mail : sales@uiapl.com; kumaran@uiapl.com

**CERTIFICATE**

This is to certify that **Ms.T.PRAVEENA**,  
Studying II year ME – Mechatronics at Thiagarajar College of  
Engineering, Madurai, has successfully completed the  
**INTERNSHIP** in our company from 21.1.2018 to 25.4.2018.

For Unique Industrial Automation Private Ltd.

*M. [Signature]* 27/4/18  
Managing Director



**UNIQUE INDUSTRIAL AUTOMATION PRIVATE LTD**

"KUMARAN TOWERS" 58-B, T.P.K. Main Road, (Opp. to Alagappan Nagar Railway Gate),  
Palanganatham, Madurai - 625 003. Phone: 0452 2374777, Mobile : 7358426060  
E-mail : sales@uiapl.com; kumaran@uiapl.com

# THIAGARAJAR COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.



## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “DRILLING PATH OPTIMIZATION USING EVOLUTIONARY COMPUTATION”, being submitted by *J.JONES GNANASELWYN* (Register Number 16MC002) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics Engineering**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

  
Dr. G. KANAGARAJ

Associate Professor,

Department of Mechatronics Engineering,  
(Guide)



  
Dr. M. PALANINATHARAJA

Professor and Head,

Department of Mechatronics Engineering,

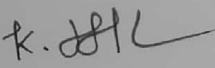
Station: Madurai

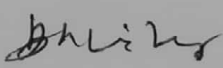
Date: 4/5/2018

---

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 5/5/2018.

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER

  
HDMCT

f

# THIAGARAJAR COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.



## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “NAVIGATION AND TRACKING OF CLMR USING GPS – GLONASS SYSTEM”, being submitted by *I.LEANDO* (Register Number **16MC003**) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics Engineering**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

*Swinny Pombi*  
Mr. S. JULIUS FUSIC

(Assistant Professor)

Department of Mechatronics Engineering,  
(Guide)



*M. Palaninatharaja*

Dr. M. PALANINATHARAJA

Professor and Head,

Department of Mechatronics Engineering,

Station: Madurai

Date: *04-05-2018*

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on *05.05.2018*.

*Swinny Pombi*  
INTERNAL EXAMINER

*K. J. J. ✓*  
EXTERNAL EXAMINER

*M. Palaninatharaja*  
HDMCT  
*J*

# THIAGARAJAR COLLEGE OF ENGINEERING

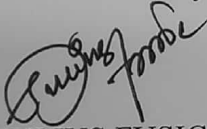
(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.




## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “**PATH PLANNING OF ROBOT USING DEEP LEARNING**”, being submitted by **P.RAMKUMAR** (Register Number **16MC005**) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

  
Mr. S. JULIUS FUSIC  
(Assistant Professor)  
Department of Mechatronics Engineering,  
(Guide)



  
Dr. M. PALANINATHARAJA  
Professor and Head,  
Department of Mechatronics Engineering,

Station: Madurai

Date: 05/05/2018

---

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 5-05-2018.

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER

  
HDMCT

# THIAGARAJAR COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.



## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project I entitled “AUTOMATIC FRUITS SORTING AND GRADING BASED ON MACHINE VISION SYSTEM”, being submitted by **K.SATHYASEELAN** (Register Number **16MC006**) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics engineering**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

DR.L.R.KARLMARX

(Associate Professor)

Department of Mechatronics,

(Guide)

Station: Madurai

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 05-05-2018.



Dr. M.PALANINATHARAJA

Professor and Head,

Department of Mechatronics,

INTERNAL EXAMINER

EXTERNAL EXAMINER

HDMCT

# THIAGARAJAR COLLEGE OF ENGINEERING


(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.

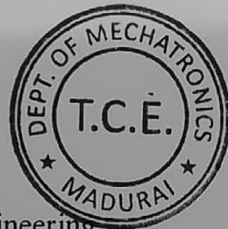


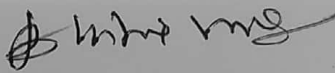
## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “DESIGN AND IMPLEMENTATION OF SPY ROBOT”, being submitted by **M.SHUNMATHI** (Register Number **16MC007**) in partial fulfillment for the requirement of **Master of Mechatronics Engineering**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

  
Mr. S. PARATHASARATHI  
(Assistant Professor)  
Department of Mechatronics Engineering,  
(Guide)


Station: Madurai

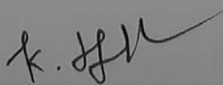



  
Dr. M. PALANINATHARAJA  
Professor and Head,  
Department of Mechatronics Engineering,

Date: 04-05-2018

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 5.5.18.

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER

  
HDMCT

f

# THIAGARAJAR COLLEGE OF ENGINEERING

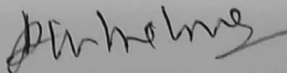
(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.




## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “SWARM INTELLIGENCE BASED SOLDIER ASSISTANCE ROBOTS”, being submitted by **T.SIVANAND** (Register Number **16MC008**) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics Engineering**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

  
Dr. L.R KARLMARX  
(Associate Professor)  
Department of Mechatronics Engineering,  
(Guide)

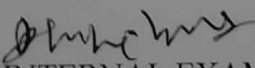


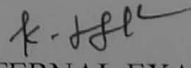
  
Dr. M. PALANINATHARAJA  
Professor and Head,  
Department of Mechatronics Engineering,

Station: Madurai

Date: 04-05-2018

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 5-5-2018.

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER

  
HDMCT



# THIAGARAJAR COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.



## BONAFIDE CERTIFICATE

This is to certify that the 14MC410 Project II entitled “DESIGN AND IMPLEMENTATION OF A TWO LINK DELTA ROBOT”, being submitted by **K. SUBASH KANNAN** (Register Number 16MC009) in partial fulfillment for the requirement of **Master of Engineering Degree in Mechatronics**, is a record of bonafide work done by him during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

Mr. GANESH M.A.,

Guide

Assistant Professor,

Department of Mechatronics Engineering,



Dr. M. PALANINATHARAJA

Professor and Dean,

Head of the Department,

Department of Mechatronics Engineering,

Station: Madurai

Date: 05 / 05 / 2018.

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 05/05/2018.

INTERNAL EXAMINER

EXTERNAL EXAMINER

HDMCT

# THIAGARAJAR COLLEGE OF ENGINEERING

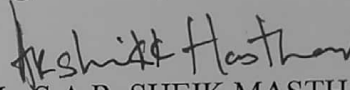
(An Autonomous Institution Affiliated to Anna University, Chennai)

MADURAI – 625 015.



## BONAFIDE CERTIFICATE

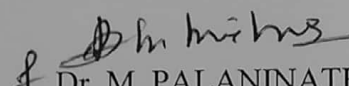
This is to certify that the 14MC410 Project II entitled “DESIGN AND DEVELOPMENT OF INTELLIGENT NAVIGATION CONTROL SYSTEMS FOR AUTONOMOUS ROBOTS USING NEURAL NETWORK”, being submitted by *R VIJI* (16MC010) in partial fulfillment for the requirement of Master of Engineering Degree in Mechatronics Engineering, is a record of bonafide work done by him/her during the year 2017-2018 under my supervision. The results embodied in this report have not been submitted to any other university or institute for the award of any degree or diploma.

  
Mr. S.A.R. SHEIK MASTHAN

Assistant Professor,

Department of Mechatronics Engineering,  
(Guide)

Station: Madurai

  
Dr. M. PALANINATHARAJA

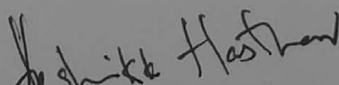
Professor and Head,

Department of Mechatronics Engineering,

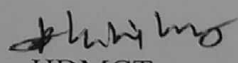


Date: 4.5.18

Certified that the Candidate was examined in the Viva-Voce Examination held at Thiagarajar College of Engineering, Madurai on 05.05.18.

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER

  
HDMCT

