

ACADEMIC YEAR (2021-2022)



**J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY
T.N.Palayam(po),Gobi(tk)-638506, Erode(dt).**

**Metric
No 1.3.2**

S.No	Name of the course	course code	programme offering	Experiential learning			Number of students
				project work	field work	inplant training	
(2021-2022) Regulation-2017							
1	Advanced Software Engineering	CP5154	MASTER OF COMPUTER SCIENCE AND ENGINEERING	✓			1
2	Machine Learning Techniques	CP5191	MASTER OF COMPUTER SCIENCE AND ENGINEERING	✓			1
3	Network Design and Technologies	CP5201	MASTER OF COMPUTER SCIENCE AND ENGINEERING	✓			1
4	Security Practices	CP5291	MASTER OF COMPUTER SCIENCE AND ENGINEERING	✓			1


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MASTER OF COMPUTER SCIENCE AND ENGINEERING

2021-2022

S.NO	REG.NO	STUDENT NAME	PROJECT	INTERNSHIP
1	731220405001	ANUKRISHNAN K R	✓	


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MASTER OF COMPUTER SCIENCE AND ENGINEERING

S.No	Name of the Course that include experiential learning through Project Work/Internship/Field Visit
1	Advanced Software Engineering
2	Machine Learning Techniques
3	Network Design and Technologies
4	Security Practices

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PROJECT

OBJECTIVES:

- To understand Software Engineering Lifecycle Models
- To do project management and cost estimation
- To gain knowledge of the System Analysis and Design concepts.
- To understand software testing approaches
- To be familiar with DevOps practices

UNIT I INTRODUCTION 9

Software engineering concepts – Development activities – Software lifecycle models - Classical waterfall - Iterative waterfall – Prototyping – Evolutionary - Spiral – Software project management – Project planning – Estimation – Scheduling – Risk management – Software configuration management.

UNIT II SOFTWARE REQUIREMENT SPECIFICATION 9

Requirement analysis and specification – Requirements gathering and analysis – Software Requirement Specification – Formal system specification – Finite State Machines – Petrinets – Object modelling using UML – Use case Model – Class diagrams – Interaction diagrams – Activity diagrams – State chart diagrams – Functional modelling – Data Flow Diagram.

UNIT III ARCHITECTURE AND DESIGN 9

Software design – Design process – Design concepts – Coupling – Cohesion – Functional independence – Design patterns – Model-view-controller – Publish-subscribe – Adapter – Command – Strategy – Observer – Proxy – Facade – Architectural styles – Layered - Client-server - Tiered - Pipe and filter.- User interface design

UNIT IV TESTING 9


Testing – Unit testing – Black box testing– White box testing – Integration and System testing– Regression testing – Debugging - Program analysis – Symbolic execution – Model Checking

UNIT V DEVOPS 9

DevOps:Motivation-Cloud as a platform-Operations- Deployment Pipeline:Overall Architecture-Building and Testing-Deployment- Case study: Migrating to Microservices.

TOTAL: 45 PERIODS**OUTCOMES:**


At the end of this course, the students will be able to:


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- Understand the advantages of various Software Development Lifecycle Models
- Gain knowledge on project management approaches as well as cost and schedule estimation strategies
- Perform formal analysis on specifications
- Use UML diagrams for analysis and design
- Architect and design using architectural styles and design patterns
- Understand software testing approaches
- Understand the advantages of DevOps practices

REFERENCES:

1. Bernd Bruegge, Alan H Dutoit, Object-Oriented Software Engineering, 2nd edition, Pearson Education, 2004.
2. Carlo Ghezzi, Mehdi Jazayeri, Dino Mandrioli, Fundamentals of Software Engineering, 2nd edition, PHI Learning Pvt. Ltd., 2010.
3. Craig Larman, Applying UML and Patterns, 3rd ed, Pearson Education, 2005.
4. Len Bass, Ingo Weber and Liming Zhu, —DevOps: A Software Architect's Perspective, Pearson Education, 2016
5. Rajib Mall, Fundamentals of Software Engineering, 3rd edition, PHI Learning Pvt. Ltd., 2009.
6. Stephen Schach, Software Engineering 7th ed, McGraw-Hill, 2007.


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OBJECTIVES:

- To introduce students to the basic concepts and techniques of Machine Learning.
- To have a thorough understanding of the Supervised and Unsupervised learning techniques
- To study the various probability based learning techniques
- To understand graphical models of machine learning algorithms

UNIT I INTRODUCTION 9

Learning – Types of Machine Learning – Supervised Learning – The Brain and the Neuron – Design a Learning System – Perspectives and Issues in Machine Learning – Concept Learning Task – Concept Learning as Search – Finding a Maximally Specific Hypothesis – Version Spaces and the Candidate Elimination Algorithm – Linear Discriminants – Perceptron – Linear Separability – Linear Regression.

UNIT II LINEAR MODELS 9

Multi-layer Perceptron – Going Forwards – Going Backwards: Back Propagation Error – Multi-layer MLP – Overview – Deriving Back-Propagation – Radial Basis Functions and Splines – Concepts – RBF Network – Curse of Dimensionality – Interpolations and Basis Functions – Support Vector Machines.

UNIT III TREE AND PROBABILISTIC MODELS 9

Learning with Trees – Decision Trees – Constructing Decision Trees – Classification and Regression Trees – Ensemble Learning – Boosting – Bagging – Different ways to Combine Classifiers – Probability and Learning – Data into Probabilities – Basic Statistics – Gaussian Mixture Models – Nearest Neighbor Methods – Unsupervised Learning – K means Algorithms – Vector Quantization – Self Organizing Feature Map

UNIT IV DIMENSIONALITY REDUCTION AND EVOLUTIONARY MODELS 9

Dimensionality Reduction – Linear Discriminant Analysis – Principal Component Analysis – Factor Analysis – Independent Component Analysis – Locally Linear Embedding – Isomap – Least Squares Optimization – Evolutionary Learning – Genetic algorithms – Genetic Offspring: - Genetic Operators – Using Genetic Algorithms – Reinforcement Learning – Overview – Getting Lost Example – Markov Decision Process

UNIT V GRAPHICAL MODELS 9

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Markov Chain Monte Carlo Methods – Sampling – Proposal Distribution – Markov Chain Monte Carlo – Graphical Models – Bayesian Networks – Markov Random Fields – Hidden Markov Models – Tracking Methods

TOTAL: 45 PERIODS


OUTCOMES:

Upon completion of this course, the students will be able to:

- Distinguish between, supervised, unsupervised and semi-supervised learning
- Apply the appropriate machine learning strategy for any given problem
- Suggest supervised, unsupervised or semi-supervised learning algorithms for any given problem
- Design systems that uses the appropriate graph models of machine learning
- Modify existing machine learning algorithms to improve classification efficiency

REFERENCES:

1. Ethem Alpaydin, —Introduction to Machine Learning 3e (Adaptive Computation and Machine Learning Series)l, Third Edition, MIT Press, 2014
2. Jason Bell, —Machine learning – Hands on for Developers and Technical Professionalsl, First Edition, Wiley, 2014
3. Peter Flach, —Machine Learning: The Art and Science of Algorithms that Make Sense of Datal, First Edition, Cambridge University Press, 2012.
4. Stephen Marsland, —Machine Learning – An Algorithmic Perspectivel, Second Edition, Chapman and Hall/CRC Machine Learning and Pattern Recognition Series, 2014.
5. Tom M Mitchell, —Machine Learningl, First Edition, McGraw Hill Education, 2013.


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OBJECTIVES:

- To understand the principles required for network design
- To explore various technologies in the wireless domain
- To study about 3G and 4G cellular networks
- To understand the paradigm of Software defined networks

UNIT I NETWORK DESIGN 10

Advanced multiplexing – Code Division Multiplexing, DWDM and OFDM – Shared media networks – Switched networks – End to end semantics – Connectionless, Connection oriented, Wireless Scenarios – Applications, Quality of Service – End to end level and network level solutions. LAN cabling topologies – Ethernet Switches, Routers, Firewalls and L3 switches – Remote Access Technologies and Devices – Modems and DSLs – SLIP and PPP – Core networks, and distribution networks.

UNIT II WIRELESS NETWORKS 9

IEEE802.16 and WiMAX – Security – Advanced 802.16 Functionalities – Mobile WiMAX - 802.16e – Network Infrastructure – WLAN – Configuration – Management Operation – Security – IEEE 802.11e and WMM – QoS – Comparison of WLAN and UMTS – Bluetooth – Protocol Stack – Security – Profiles

UNIT III CELLULAR NETWORKS 9

GSM – Mobility Management and call control – GPRS – Network Elements – Radio Resource Management – Mobility Management and Session Management – Small Screen Web Browsing over GPRS and EDGE – MMS over GPRS – UMTS – Channel Structure on the Air Interface – UTRAN – Core and Radio Network Mobility Management – UMTS Security

UNIT IV 4G NETWORKS 9

LTE – Network Architecture and Interfaces – FDD Air Interface and Radio Networks – Scheduling – Mobility Management and Power Optimization – LTE Security Architecture – Interconnection with UMTS and GSM – LTE Advanced (3GPP Release 10) - 4G Networks and Composite Radio Environment – Protocol Boosters – Hybrid 4G Wireless Networks Protocols – Green Wireless Networks – Physical Layer and Multiple Access – Channel Modelling for 4G – Introduction to 5G

UNIT V SOFTWARE DEFINED NETWORKS 9

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Introduction – Centralized and Distributed Control and Data Planes – Open Flow – SDN

Controllers – General Concepts – VLANs – NVGRE – Open Flow – Network Overlays – Types –

Virtualization – Data Plane – I/O – Design of SDN Framework

TOTAL : 45 PERIODS


OUTCOMES:

Upon completion of this course, the students should be able to

- Identify the components required for designing a network
- Design a network at a high-level using different networking technologies
- Analyze the various protocols of wireless and cellular networks
- Discuss the features of 4G and 5G networks
- Experiment with software defined networks

REFERENCES:

1. Erik Dahlman, Stefan Parkvall, Johan Skold, —4G: LTE/LTE-Advanced for Mobile Broadband, Academic Press, 2013.
2. Jonathan Rodriguez, —Fundamentals of 5G Mobile Networks, Wiley, 2015.
3. Larry Peterson and Bruce Davie, —Computer Networks: A Systems Approach, 5th edition, Morgan Kaufman, 2011
4. Martin Sauter, "From GSM to LTE, An Introduction to Mobile Networks and Mobile Broadband", Wiley, 2014.
5. Martin Sauter, —Beyond 3G - Bringing Networks, Terminals and the Web Together: LTE, WiMAX, IMS, 4G Devices and the Mobile Web 2.0, Wiley, 2009.
6. Naveen Chilamkurti, Sherali Zeadally, Hakima Chaouchi, —Next-Generation Wireless Technologies, Springer, 2013.
7. Paul Goransson, Chuck Black, —Software Defined Networks: A Comprehensive Approach, Morgan Kaufman, 2014.
8. Savo G Glisic, —Advanced Wireless Networks – 4G Technologies, John Wiley & Sons, 2007.
9. Thomas D.Nadeau and Ken Gray, —SDN – Software Defined Networks, O'Reilly Publishers, 2013.
10. Ying Dar Lin, Ren-Hung Hwang and Fred Baker, —Computer Networks: An Open Source Approach, McGraw Hill, 2011


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OBJECTIVES:

- To learn the core fundamentals of system and web security concepts
- To have through understanding in the security concepts related to networks
- To deploy the security essentials in IT Sector
- To be exposed to the concepts of Cyber Security and encryption Concepts
- To perform a detailed study of Privacy and Storage security and related Issues.

UNIT I SYSTEM SECURITY 9

Building a secure organization- A Cryptography primer- detecting system Intrusion- Preventing system Intrusion- Fault tolerance and Resilience in cloud computing environments- Security web applications, services and servers.

UNIT II NETWORK SECURITY 9

Internet Security - Botnet Problem- Intranet security- Local Area Network Security - Wireless Network Security - Wireless Sensor Network Security- Cellular Network Security- Optical Network Security- Optical wireless Security.

UNIT III SECURITY MANEGEMENT 9

Information security essentials for IT Managers- Security Management System - Policy Driven System Management- IT Security - Online Identity and User Management System - Intrusion and Detection and Prevention System.

UNIT IV CYBER SECURITY AND CRYPTOGRAPHY 9

Cyber Forensics- Cyber Forensics and Incidence Response - Security e-Discovery - Network Forensics - Data Encryption- Satellite Encryption - Password based authenticated Key establishment Protocols.

UNIT V PRIVACY AND STORAGE SECURITY 9

Privacy on the Internet - Privacy Enhancing Technologies - Personal privacy Policies - Detection of Conflicts in security policies- privacy and security in environment monitoring systems. Storage Area Network Security - Storage Area Network Security Devices - Risk management - Physical Security Essentials.

TOTAL : 45 PERIODS



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OUTCOMES:

Upon completion of this course the students should be able to

- Understand the core fundamentals of system security
- Apply the security concepts related to networks in wired and wireless scenario
- Implement and Manage the security essentials in IT Sector
- Able to explain the concepts of Cyber Security and encryption Concepts
- Able to attain a through knowledge in the area of Privacy and Storage security and related Issues.

REFERENCES:

1. John R. Vacca, Computer and Information Security Handbook, Second Edition, Elsevier 2013.
2. 2. Michael E. Whitman, Herbert J. Mattord, Principal of Information Security, Fourth Edition, Cengage Learning, 2012.
3. Richard E. Smith, Elementary Information Security, Second Edition, Jones and Bartlett Learning, 2016



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**CANCERNET CLASSIFIER FOR BREAST CANCER
CLASSIFICATION USING DEEP NEURAL NETWORKS**

A PROJECT REPORT(PHASE-II)

Submitted by

ANUKRISHNAN K R

731220405001

in partial fulfillment for the award of the degree of

MASTER OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING



JKK MUNIRAJAH COLLEGE OF TECHNOLOGY,

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ANNA UNIVERSITY: CHENNAI 600025

SEPTEMBER 2022

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ANNA UNIVERSITY, CHENNAI

BONAFIDE CERTIFICATE

Certified that this Report titled "CANCERNET CLASSIFIER FOR BREAST CANCER CLASSIFICATION USING DEEP NEURAL NETWORKS" is the bonafide work of "ANUKRISHNAN K R (731220405001)" who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



SIGNATURE

HEAD OF THE DEPARTMENT

Dr.N.SATHYABALAJI, M.E., Ph.D
Associate Professor,

Dept.of Computer Science and
Engineering

J.K.K Munirajah College of Technology,

T.N.Palayam.



SIGNATURE

SUPERVISOR

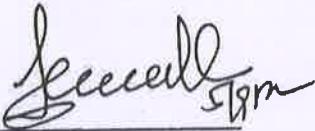
Dr.N.SATHYABALAJI, M.E., Ph.D
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Dept.of Computer Science and
Engineering

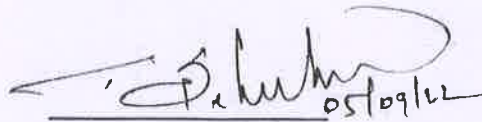
J.K.K Munirajah College of Technology,

T.N.Palayam.

Submitted for the Project Viva-voce Examination held on...05-09-2022.....



INTERNAL EXAMINER



EXTERNAL EXAMINER



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ACKNOWLEDGEMENT

I express my sincere thanks and grateful acknowledgement to our chairman **Dr. J.K.K. MUNIRAJAH M. TECH (Bolton), D.Litt.**, for providing all facilities during the course of study in this college.

I would like to express our thanks to our secretary madam **Mrs. KASTHURIPRIYA KRUPAKARMURALI M.B.A.**, who has provided all the available facilities and support that has helped us in the completing our project.

I have immense pleasure in expressing my extreme gratitude thanks to our beloved principal **Dr. K. SRIDHARAN M.E., MBA., Ph.D., M.I.S.T.E.**, for his encouragement and support.

I wish to express my heartfelt thanks to our respectful Head of the Department **Dr. N. SATHYABALAJI M.E., M.I.S.T.E., Ph.D.**, for his inspiring help, guidance, effort and energy in the right direction for completing this project.

I am privileged to thank our project coordinator **Dr. N. SATHYABALAJI M.E., M.I.S.T.E., Ph.D.**, for his enlightening thoughts and remarkable guidance that helped us in the successful completion of our project.

I also thank my guide **Mrs. M.C. SAVITHRI M.E.**, who has been a driving force to unveil the immense talents in us.

I sincerely thank my lovable parents for their motivation and great support to complete this project successfully.

I also thank all teaching and non-teaching staffs of the Department of Computer Science and Engineering and all my friends for their help and support to complete this project successfully.



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ABSTRACT

Accurate breast cancer detection using automated algorithms remains a problem within the literature. Although a plethora of work has tried to address this issue, an exact solution is yet to be found. This problem is further exacerbated by the fact that most of the existing datasets are imbalanced, i.e. the number of instances of a particular class far exceeds that of the others. In this project, I will propose a framework based on the notion of transfer learning to address this issue and focus our efforts on histopathological and imbalanced image classification. I will use the popular VGG-19 as the base model and will complement with several state-of-the-art techniques to improve the overall performance of the system. With the ImageNet dataset taken as the source domain, I will apply the learned knowledge to the target domain consisting of histopathological images.



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சுருக்கம்

தன்னியக்க வழிமுறைகளைப் பயன்படுத்தி மார்பகப்
 ற்றுநோயைத் துல்லியமாகக் கண்டறிவது இலக்கியத்திற்குள் ஒரு
 ரிர்ச்சனையாகவே உள்ளது. இந்த சிக்கலை தீர்க்க பல முயற்சிகள்
 மற்கொள்ளப்பட்டாலும், சரியான தீர்வு இன்னும்
 ண்டுபிடிக்கப்படவில்லை. தற்போதுள்ள தரவுத்தொகுப்புகளில்
 பரும்பாலானவை சமநிலையற்றவை, அதாவது ஒரு குறிப்பிட்ட
 குப்பின் நிகழ்வுகளின் எண்ணிக்கை மற்றவற்றை விட அதிகமாக
 ருப்பதால் இந்தச் சிக்கல் மேலும் அதிகரிக்கிறது. இந்தத் திட்டத்தில்,
 இந்தச் சிக்கலைத் தீர்ப்பதற்கும், ஹிஸ்டோபோதாலஜிக்கல் மற்றும்
 மநிலையற்ற பட வகைப்பாட்டில் எங்கள் முயற்சிகளை
 மயப்படுத்துவதற்கும் பரிமாற்றக் கற்றல் என்ற கருத்தின்
 டிப்படையில் ஒரு கட்டமைப்பை நான் முன்மொழிகிறேன். நான்
 ரிபலமான VGG-19 ஐ அடிப்படை மாதிரியாகப் பயன்படுத்துவேன்,
 மேலும் கணினியின் ஒட்டுமொத்த செயல்திறனை மேம்படுத்த பல
 அதிநவீன நுட்பங்களுடன் அதை நிரப்புவேன். இமேஜ்நெட்
 தரவுத்தொகுப்பை மூல டொமைனாக எடுத்துக் கொண்டு,
 ஹிஸ்டோபோதாலஜிக்கல் படங்களைக் கொண்ட இலக்கு களத்தில்
 கற்ற அறிவைப் பயன்படுத்துவேன்.


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CHAPTER 10

CONCLUSION

1 Conclusion

In this work, we will try to classify large-scale histopathological images using automated machine-driven procedures. The main problem of this task is that the dataset was highly imbalanced. To address this issue, we will use the paradigm of transfer learning and train the existing VGG-19 on more than a million ImageNet images before applying the learned knowledge to the dataset of histopathological images. The model will be further enhanced with different classification methods at the output layer. The performance of the model will be analysed using Precision, Recall, F1-score etc. Furthermore, the classification performance of the technique will be compared with existing frameworks.

In the first phase of the project, completed the literature survey. Identified the drawback/limitations of the existing work on cancer detection and classification. Based on literature survey new automatic screening system using two deep neural network architecture for breast cancer classification is proposed.

In the next phase of the project the detection and classification of cancer using the proposed new automatic screening system with two deep neural network architectures is implemented and the performance analysis of the model was evaluated.

In the third phase of the project, Breast cancer detection is implemented from histopathology images. We employed a system architecture with segmentation, feature extraction and classification. Various CNNs and segmentation methods are experimented to achieve maximum performance of the model. VGG with and without segmentation achieves a precision score of 100%, Densenet with and without segmentation achieves a recall score of 100%. Maximum F1-score is obtained when the system utilizes VGG model with U-NET segmentation.



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INTERNSHIP

APPENDIX-3
Paper Publication Proof

**INTERNATIONAL JOURNAL OF NOVEL RESEARCH
AND DEVELOPMENT (IJNRD) | IJNRD.ORG**
An International Open Access, Peer-reviewed, Refereed Journal
ISSN : 2456-4184

The Board of
International Journal of Novel Research and Development
Is hereby awarding this certificate to
Anu Krishnan K R
In recognition of the publication of the paper entitled
**Cancernet Classifier for Breast Cancer Classification Using Deep Neural
Networks and U-NET segmentation**
Published In IJNRD (www.ijnrd.org) ISSN Approved & 6.76 Impact Factor
Published in Volume 7 Issue 6, June-2022 | Date of Publication: 2022-06-07
Co-Authors - *Dr. N. Sathyabaleji*

Registration ID : 181520 Paper ID - IJNRD2206008 Editor-in Chief
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An International Scholarly, Open Access, Multi-disciplinary, Indexed Journal
Website: www.ijnrd.org | Email: editor@ijnrd.org | ESTD: 2016

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Sreedh

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Internship

1 message

Mon, Nov 07 2022 at 2.00 PM

From: HODCSE<hodcse@jkkmct.edu.in>

Date: Mon, Nov 07 2022 at 2.00 PM

Subject: Internship - reg

To: QTREE TECHNOLOGIES<sherinmohan@qtree.com>

Dear Sir/Madam,

On behalf of our institution J K K Munirajah College of Technology our student studying in M.E – Computer Science and Engineering department. As part of their course, they have to undergo internship training for a period of Fourteen days from 14.11.2022 to 27.11.2022. They wish to undergo training in your company and your kind gesture to offer them to do training will be very helpful for their academic. This training will boost their confidence and prospects. So I request you to grant them permission to undergo training. They promise to abide by the rules and regulations of your company.

Students Name List

- 1)NAVEEN.S
- 2)PONMANI.A
- 3)RAJESHKUMAR.A
- 4)RANJANI.R
- 5)SURESHKUMAR.P

Thanking You,

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Yours Truly,

HOD /CSE DEPARTMENT

Internship Training

1 message

TUE, 08 Nov 2022 at 11.00 AM

From: QTREE TECHNOLOGIES<sherinmohan@qtree.com>

Date: TUE, 08 Nov 2022 at 11.00 AM

Subject: Internship Training Confirmation - reg

To: HODCSE<hodcse@jkkmct.edu.in>

Dear Sir,


On behalf of Blazon Solutions, we would like to notify you of this opportunity for an internship. On your acceptance of this offer, you can continue an internship with the company on from 14/11/2022 to 27/11/2022. We assure you that the details of your particulars we have collected during your program should be saved in our convert privately. We appreciate your interest in our company. The following students are instructed to make their presence at the administrative office on 14.11.2022 at 9.00 AM. The students must follow proper dress code inside the company and should maintain the discipline as per the norms of the company.

The student's names are

- 1)NAVEEN.S
- 2)PONMANI.A
- 3)RAJESHKUMAR.A
- 4)RANJANI.R
- 5)SURESHKUMAR.P

We wish them for their successful training.

With Regards,
HR,
BLAZON SOLUTIONS.



PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



QTREE TECHNOLOGIES

No 22, First Floor ,Ram Nagar ,Coimbatore -641009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr.NAVEEN S**, studying M.E.,Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed **Internship Program** from **14.11.2022 to 27.11.2022** at **Q-TREE technologies**
During the **Internship**, him Performance was good.



A handwritten signature in black ink, appearing to read 'Rohit'.

PROJECT MANAGER

A handwritten signature in green ink, appearing to read 'Seetha'.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



QTREE TECHNOLOGIES

No 22, First Floor ,Ram Nagar ,Coimbatore -641009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr.SURESHKUMAR P**, studying M.E.,Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed **Internship Program** from **14.11.2022 to 27.11.2022** at **Q-TREE technologies**.
During the **Internship**, his Performance was good.



A handwritten signature in black ink, appearing to read 'Rohit'.

PROJECT MANAGER

A handwritten signature in green ink, appearing to read 'Sreedh'.

PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).**



QTREE TECHNOLOGIES

No 22, First Floor ,Ram Nagar ,Coimbatore -641009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.PONMANI A**, studying M.E.,Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed **Internship Program** from **14.11.2022 to 27.11.2022** at **Q-TREE technologies** During the **Internship**, her Performance was good.



A handwritten signature in black ink, appearing to read 'Rajesh'.

PROJECT MANAGER

A handwritten signature in green ink, appearing to read 'Keeed'.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



QTREE TECHNOLOGIES

No 22, First Floor ,Ram Nagar ,Coimbatore -641009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. RAJESH KUMAR A**, studying M.E., Computer Science and Engineering in **J.K.K. MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed Internship Program from **14.11.2022 to 27.11.2022** at **Q-TREE technologies**. During the Internship, his Performance was good.



A handwritten signature in black ink, appearing to read 'Rajesh'.

PROJECT MANAGER

A handwritten signature in green ink, appearing to read 'Keeed'.

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).



QTREE TECHNOLOGIES

No 22, First Floor ,Ram Nagar ,Coimbatore -641009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.RANJANI R**, studying M.E.,Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed **Internship** Program from **14.11.2022 to 27.11.2022** at **Q-TREE technologies**
During the **Internship**, her Performance was good.



A handwritten signature in black ink, appearing to read 'Ranjani R'.

PROJECT MANAGER

A handwritten signature in green ink, appearing to read 'Seetha'.

PRINCIPAL

**JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).**



Internship

1 message

Mon, Nov 07 2022 at 3.00 PM

From: HODCSE<hodcse@jkkmct.edu.in>

Date: Mon, Nov 07 2022 at 3.00 PM

Subject: Internship - reg

To: BLAZON SOLUTIONS< sivaraj24@gmail.com>

Dear Sir/Madam,

On behalf of our institution J K K Munirajah College of Technology our student studying in M.E – Computer Science and Engineering department. As part of their course, they have to undergo internship training for a period of Fourteen days from 14.11.2022 to 27.11.2022. They wish to undergo training in your company and your kind gesture to offer them to do training will be very helpful for their academic. This training will boost their confidence and prospects. So I request you to grant them permission to undergo training. They promise to abide by the rules and regulations of your company.

Students Name List

- 1) ARUNKUMAR.R
- 2) CHARLY.S
- 3) GAYATHRIS
- 4) INDHIRAN.R
- 5) LOGARAJA.S

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

Thanking You,

Yours Truly,
HOD CSE DEPARTMENT



Internship Training

1 message

TUE, 08 Nov 2022 at 11.00 AM

From: BLAZON SOLUTIONS< sivaraj24@gmail.com>

Date: TUE, 08 Nov 2022 at 11.00 AM

Subject: Internship Training Confirmation - reg

To: HODCSE<hodcse@jkkmct.edu.in>

Dear Sir,


On behalf of **Blazon Solutions**, we would like to notify you of this opportunity for an **internship**. On your acceptance of this offer, you can continue an internship with the company on from **14/11/2022 to 27/11/2022**. We assure you that the details of your particulars we have collected during your program should be saved in our convert privately. We appreciate your interest in our company. The following students are instructed to make their presence at the administrative office on 14.11.2022 at 9.00 AM. The students must follow proper dress code inside the company and should maintain the discipline as per the norms of the company.

The student's names are

- 1) ARUNKUMAR.R
- 2) CHARLY.S
- 3) GAYATHRI.S
- 4) INDHIRAN.R
- 5) LOGARAJA.S

We wish them for their successful training.

With Regards,
HR,
BLAZON SOLUTIONS.


PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

BLAZON

SMALL THINGS MAKE A BIG DIFFERENCE



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr.LOGARAJA S**, studying M.E., Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed Internship Program from **14.11.2022 to 27.11.2022** at **BLAZON Solution**.

During the Internship, him Performance was good.

Managing Director

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

BLAZON

SMALL THINGS MAKE A BIG DIFFERENCE



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.CHARLY S**, studying M.E., Computer Science and Engineering in **J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed Internship Program from **14.11.2022 to 27.11.2022** at **BLAZON Solution**.

During the Internship, her Performance was good.

Managing Director

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

BLAZON

SMALL THINGS MAKE A BIG DIFFERENCE



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. ARUNKUMAR R**, studying M.E., Computer Science and Engineering in **J.K.K. MUNIRAJAH COLLEGE OF TECHNOLOGY** has successfully completed Internship Program from **14.11.2022** to **27.11.2022** at **BLAZON Solution**.
During the Internship, his Performance was good.

Managing Director

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T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

BLAZON

SMALL THINGS MAKE A BIG DIFFERENCE



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr.INDHIRAN R**, studying M.E., Computer Science and Engineering in J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY has successfully completed Internship Program from **14.11.2022 to 27.11.2022** at BLAZON Solution.
During the Internship, him Performance was good.

Managing Director

PRINCIPAL
JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
GOBI (Tk), ERODE (Dt).

BLAZON

SMALL THINGS MAKE A BIG DIFFERENCE



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. GAYATHRI S**, studying M.E., Computer Science and Engineering in J.K.K.MUNIRAJAH COLLEGE OF TECHNOLOGY has successfully completed Internship Program from **14.11.2022 to 27.11.2022** at BLAZON Solution.

During the Internship, her Performance was good.

Managing Director

PRINCIPAL

JKK MUNIRAJAH COLLEGE
OF TECHNOLOGY
T.N. PALAYAM (Po)-638 506.
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