



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

## APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:26-05-2020

Department	COMPUTER APPLICATIONS	Application No.	20200024
Area of Research	COMPUTER APPLICATION	Research Mode	PART TIME

**Name** :JOICE T  
**Date of Birth / Age** :17-05-1977 / 43 Years  
**Gender** :FEMALE  
**Category** :OC  
**e-Mail ID** :joiceshabu@gmail.com  
**Mobile** :9846102111



<b>Father's/Husband's Name</b>	SHABU P MATHEW	<b>Father's/Husband's Occupation</b>	BUSINESS
<b>Family Income</b>	500000	<b>Residential Type</b>	RURAL
<b>Birth Place</b>	KERALA	<b>Mother Tongue</b>	MALAYALAM
<b>Religion</b>	CHRISTIAN	<b>Martial Status</b>	MARRIED
<b>Aadhaar No.</b>	348210150971	<b>PAN No.</b>	AMYPT8238P
<b>Physically Challenged</b>	NO	<b>Type of Disability</b>	-
<b>Address for Communication:</b> PALLIPPATTUTHOTTATHIL HOUSE KIDANGOOR P O ANGAMALY ERNAKULAM DISTRICT KERALA INDIA Pin-683572		<b>Permenant Address:</b> PALLIPPATTUTHOTTATHIL HOUSE KIDANGOOR P O ANGAMALY ERNAKULAM DISTRICT KERALA INDIA Pin-683572	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
BCA	COMPUTER APPLICATIONS	MADURAI KAMARAJ UNIVERSITY	2006	71.75%	FIRST	DISTANCE
MCA	COMPUTER APPLICATIONS	INDIRA GANDHI OPEN UNIVERSITY	2010	68.32%	FIRST	DISTANCE

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY	ASST.PROFESSOR	2014-09-16	2020-05-26	TEACHING	

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
20200024_200526194045	SHMP8834280039	26-05-2020	600	SUCCESS

# TO PROPOSE A MODEL FOR IDENTIFYING SECURITY THREATS ON IOT USING FOG COMPUTING

The swift growth in emerging technologies such as sensors, smart phones, 5G connection and virtual reality leads to innovative applications such as connected industries, smart city, smart energy, smart agriculture etc. IoT has evolved due to the convergence of these multiple technologies. The traditional fields of embedded systems, wireless sensor, control systems, automation as well as real-time analytics, machine learning, commodity sensors etc contribute to enabling the Internet of Things.

As the technology grows the cyber attacks and data breaches were also targets on IoTs. The prospect of interconnectivity among IoT devices makes them vulnerable. It is clearly evident that there are a huge number of vulnerabilities for IoT devices[3]. According to [2], many organizations are exposed to greatest challenges in monitoring network based threats, prominently in the following sectors; government, energy, health care, banks and research centres.

Generally the IoT devices generate immense amount of data that flows through network is at possible risk for network attacks. Further existing tools and techniques are insufficient to detect innovative attacks triggered by cyber criminals due to volume, velocity, and variety of data. Existing mechanisms lack processing at large scales and bigdata analytics have been used to analyze and correlate security related data efficiently.

There are some solutions suggested by different authors. Most existing literature separately focus on deep learning, bigdata and IoT security. Many studies failed to consider the impact of volume, velocity veracity and variety of days generated by IoT devices. Hence inclusion of bigdata technology become mandatory to address the impact of V's.

But, there is a solution suggested by [1] to employ deep learning and big data technologies together to strengthen security of IoT devices. [1] have suggested a novel frame work for IoT security based on deep learning and bigdata technologies. Due to the limitation of storage in IoT devices leads to the storage of bigdata on cloud. The limitation of storage on cloud is the latency of data.

In this context I propose a model to analyze the existing threats happend in the past to suggest the vulnerabilities. To resolve the issue of latency, fog computing technologies can also be suggested.

## REFERENCES

- [1] M.A. Amanullah, R.A.A. Habeeb, F.H. Nasaruddin et al., Deep learning and big data technologies for IoT security, Computer Communications (2020), doi: <https://doi.org/10.1016/j.comcom.2020.01.016>.
- [2] R. A. A. Habeeb, F. Nasaruddin, A. Gani, I. A. T. Hashem, E. Ahmed, M. Imran, Real-time big data processing for anomaly detection: A survey, International Journal of Information Management 45 (2019) 289–307.
- [3] New trends in the world of IoT threats, accessed on May 10, 2019. URL <https://securelist.com/new-trends-in-the-world-of-iot-threats/87991/>

# TO PROPOSE A MODEL FOR IDENTIFYING SECURITY THREATS ON IOT USING FOG COMPUTING

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- [2] R. A. A. Habeeb, F. Nasaruddin, A. Gani, I. A. T. Hashem, E. Ahmed, M. Imran, Real-time big data processing for anomaly detection: A survey, International Journal of Information Management 45 (2019) 289–307.
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**MADURAI KAMARAJ UNIVERSITY**  
BACHELOR OF COMPUTER APPLICATIONS (NON-SEMESTER)

GJS 120824

**STATEMENT OF MARKS**

NAME OF THE CANDIDATE		REGISTER NO.	DATE OF PUBLICATION						
JOICE T		A4M4720004	08 MAR 2006						
COLLEGE OF STUDY		CENTRE NO.	EXAM M. & YR.						
DIRECTORATE OF DISTANCE EDUCATION		844	NDV 2005						
SUB CODE	SUBJECT DESCRIPTION	MAX MARKS			MARKS OBTAINED				
		I	E	T	I	E	T	R	M. & YR.
A21	DISCRETE MATHEMATICS	--	100	100	--	048	048	P	N04
A22	PROGRAMMING IN C++	--	100	100	--	076	076	P	N04
A23	COMPUTER GRAPHICS	--	100	100	--	067	067	P	N04
A24	OPERATING SYSTEMS	--	100	100	--	060	060	P	N04
A25	COMPUTER ORGANISATION	--	100	100	--	054	054	P	N04
A26	COMPUTER ALGORITHMS AND DATA STRUCTURE	--	100	100	--	073	073	P	N04
A27	PRACTICAL LAB-3 C++LAB	--	100	100	--	092	092	P	N04
A28	PRACTICAL LAB-4 GRAPHICS LAB	--	100	100	--	096	096	P	N04
A31	SOFTWARE ENGINEERING	--	100	100	--	071	071	P	N05
A32	CLIENT SERVER COMPUTING WITH ORACLE	--	100	100	--	073	073	P	N05
A33	COMPUTER NETWORKS	--	100	100	--	065	065	P	N05
A34	MULTIMEDIA TECHNOLOGY AND APPLICATIONS	--	100	100	--	060	060	P	N05
A35	JAVA PROGRAMMING	--	100	100	--	065	065	P	N05
A36	OPERATIONS RESEARCH	--	100	100	--	064	064	P	N05
A37	PROGRAMMING LAB-5 VISUAL BASIC ORACLE	--	100	100	--	090	090	P	N05
A38	PROGRAMMING LAB-6 JAVA,HTML	--	100	100	--	094	094	P	N05
GKL	GENERAL KNOWLEDGE	--	100	100	--	059	059	P	N04
	<<< END OF STATEMENT >>>								
CLASS FIRST		TOTAL MARKS 1148/1600							

Signature of the Candidate

S. Shanmugiah

Any alteration or overwriting makes this Statement of Marks invalid.  
PASSING MINIMUM IS 35%. \*\* NO INTERNAL\*\*  
Palkalai Nagar,  
Madurai 625 021.

self altered fail

DR S SHANMUGIAH  
Controller of Examinations

Other Abbreviations - R - Result; P - Pass; F - Fail; AAA - Absent; SUB - Subject; M - Month;  
(A - April; M - May; J - June; S - Sept; N - Nov; D - Dec; YR - Year; HAV - Half Year; M - Month; I - Internal; E - External; T - Total)



No. C - 21210

INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
NEW DELHI

(STUDENT REGISTRATION DIVISION)  
MIGRATION CERTIFICATE

Sh./Smt./Kumari JOICE T

son/daughter of Sh./Smt. D THANKACHAN

student of MASTER OF COMPUTER APPLICATIONS Programme

registered under Regional Centre COCHIN with IGNOU

Enrolment No. 070458400 has successfully completed the degree

in TEE JUNE 2010 This University has no objection to his/her joining any other University.

The University is not aware of anything about his/her character or conduct which would debar him/her admission to another University/Institute. The University is also not aware of student's admission in any other University/Institute during the gap period, if any

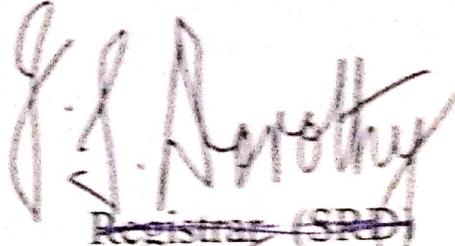
Date: 04/07/2019

New Delhi-110 068

COCHIN

Regional Centre



  
~~Registrar (SRD)~~  
Regional Director

Note: No separate Transfer Certificate or letter in lieu thereof will be issued.



# FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY (FISAT)<sup>®</sup>

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(Approved by AICTE - Affiliated to APJ Abdul Kalam Technological University, Kerala)

Tel: (O) 0484-2725272 Fax: 0484-2725250 E-mail: mail@fisat.ac.in Website: www.fisat.ac.in

Hormis Nagar  
5<sup>th</sup> February 2020

## EXPERIENCE CERTIFICATE

This is to certify that **Ms. Joice T**, Pallippattu Thottathil, Kidangoor, Angamaly - 683572, has been working as Assistant Professor in the Department of Computer Applications (MCA) from 16<sup>th</sup> September 2014 till date.

**Ms. Joice T**, has been a dedicated teacher. Her character and conduct are good.



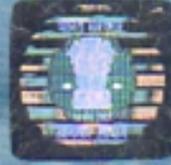
PRINCIPAL

आयकर विभाग  
INCOME TAX DEPARTMENT



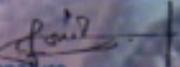
भारत सरकार  
GOVT. OF INDIA

JOICE T  
THANKACHAN DANIEL



17/05/1977  
Permanent Account Number

AMYPT8238P

  
Signature





**INDIAN UNION**  
**KERALA STATE**  
**DRIVING LICENCE**

No.: 41/3000/2007      Date: 15/10/2007

Name : JOICE.T.

SNWD of : SHABU

Address : 402/B

Pallippattuthottathil

Kidangoor

Thuravoor

Date of Birth : 17/05/1977

Blood Group :

Category

Non-Transport

Transport

Valid from

15/10/2007

Valid To

15/05/2027



सं.  
No. 95640

अनुक्रमांक  
Enrolment No. 070458400

इन्दिरा गांधी राष्ट्रीय मुक्त विश्वविद्यालय  
INDIRA GANDHI NATIONAL OPEN UNIVERSITY

प्रमाणित किया जाता है कि  
This is to certify that

*Joice T.*

को निर्धारित पाठ्यक्रमों को पूरा करने और  
after having passed the prescribed courses of study in the

June 2010

की परीक्षा उत्तीर्ण करने पर स्नातकोत्तर उपाधि  
examination is hereby awarded the Degree of

*Master of Computer Applications*

प्रदान की जाती है।

श्रेणी / Division *First*

*Udair*  
कुलसचिव  
Registrar



*Indira*  
कुलपति  
Vice Chancellor

नई दिल्ली / New Delhi

दिनांक / Dated August 31, 2010



# इन्दिरा गाँधी राष्ट्रीय मुक्त विश्वविद्यालय INDIRA GANDHI NATIONAL OPEN UNIVERSITY

372

MCA 070458400

JOICE T.

PALLIPPATTUTHOTTATHIL

KIDANGOOD PO

ANGAMLY

ERNAKULAM 683572

KERALA

STUDENT EVALUATION DIVISION

Maidan Garhi, New Delhi - 110 068

**Master of Computer Applications**

STATEMENT OF MARKS

CERTIFICATE NO. :AD 0001186

DATE : 29/09/2010

JUNE 2010

TERM-END EXAM. :

COURSE CODE	CONTINUOUS EVALUATION		TERM-END EXAMINATION		WEIGHTAGE		M.M.	OVERALL MARKS		COURSE STATUS
	MKS OBT.	LG	MKS. OBT.	L.G.	25% of C.E.	75% of T.E.E.		MKS	L.G.	
MCS011	82	A	66	B	21	50	100	71	B	SC
MCS012	79	A	53	C	20	40	100	60	B	SC
MCS013	86	A	60	B	22	45	50	34	B	SC
MCS014	68	B	83	A	17	62	100	79	A	SC
MCS015	76	A	50	C	19	38	50	29	C	SC
MCS021	85	A	76	A	21	57	100	78	A	SC
MCS022	78	A	70	B	20	53	100	73	B	SC
MCS023	88	A	52	C	22	39	100	61	B	SC
MCS024	90	A	60	B	23	45	100	68	B	SC
MCS031	95	A	68	B	24	51	100	75	A	SC
MCS032	98	A	50	C	25	38	100	63	B	SC
MCS033	88	A	52	C	22	39	50	31	B	SC
MCS034	72	B	54	C	18	41	100	59	C	SC
MCS035	73	B	57	C	18	43	100	61	B	SC
MCS041	89	A	45	D	22	34	100	56	C	SC
MCS042	80	A	50	C	20	38	100	58	C	SC
MCS043	85	A	67	B	21	50	100	71	B	SC
MCS051	85	A	56	C	21	42	100	63	B	SC
MCS052	86	A	54	C	22	41	50	32	B	SC
MCS053	79	A	43	D	20	32	100	52	C	SC
MCSE003	87	A	63	B	22	47	100	69	B	SC
MCSE004	83	A	40	D	21	30	100	51	C	SC
MCSE011	86	A	57	C	22	43	100	65	B	SC

**LAB COURSES**

COURSE CODE	CONTINUOUS EVALUATION		TERM-END PRACTICAL EXAMINATION					WEIGHTAGE		M.M.	OVERALL MARKS		COURSE STATUS	
	MKS OBT.	LG	MKS SEC-1	MKS SEC-2	MKS SEC-3	MKS SEC-4	T.P.M. OUT OF 100		25% of C.E.		75% of TEPE	MKS		L.G.
							MKS	LG						
MCSL016	83	A	45	#	#	#	90	A	21	68	50	45	A	SC
MCSL017	91	A	25	25	#	#	100	A	23	75	50	49	A	SC
MCSL025	57	C	24	13	21	22	80	A	14	60	100	74	B	SC
MCSL036	69	B	28	26	36	#	90	A	17	68	100	85	A	SC
MCSL045	93	A	24	25	#	#	98	A	23	74	50	49	A	SC
MCSL054	82	A	24	24	#	#	96	A	21	72	50	47	A	SC

**PROJECT WORK**

COURSE CODE	CONTINUOUS EVALUATION		REPORT MARKS	VIVA MARKS	M.M.	OVERALL MARKS		COURSE STATUS
	MKS	L.G.				MKS	L.G.	
MCS044	65	B	76	80	100	74	B	SC
MCSP060	#	#	96	35	200	131	B	SC

PGCA SUCCESSFULLY COMPLETED IN DECEMBER 2007: MARKS = 721/1000 WITH 72.10%

NCA SUCCESSFULLY COMPLETED IN JUNE 2010 : MARKS = 1913/2800 WITH 68.32%

*P. Jeyap*