# ALU DCS

# PLUG-INS

Issue 1 December 2016



PUBLISHED BY DEPARTMENT OF COMPUTER SCIENCE ALAGAPPA UNIVERSITY KARAIKUDI



Plug-ins

**E-Magazine** 

PUBLISHED BY DEPARTMENT OF COMPUTER SCIENCE ALAGAPPA UNIVERSITY KARAIKUDI **ALU DCS Plug-ins** is a E-Magazine. It is published Yearly by the Department of Computer Science, Alagappa University, Karaikudi, Tamilnadu - 630 003, India.

Copyright © 2016 by Alagappa University

All rights reserved. No part of the material protected by this copyright material may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording or any information storage and retrieval system, without written permission from the publisher.

Inquiries should be addressed to the Editor.

Phone: +91(4565) 226291 e-mail: editoraludcsplugins@gmail.com





கோடி கொடுத்த கொடைஞன் குடியிருந்த வீடும் கொடுத்த விழுத்தெய்வம் - தேடியும் அள்ளிக்கொடுத்த அழகன் அறிவூட்டும் வெள்ளி விளக்கே விளக்கு.

முன்பெருந் தவத்தால் தோன்றி முயன்றெமைக் காக்கும் வள்ளல் அன்பினால் அழகப்பாவின் அறம்பணி போற்றி செய்வோம்.



Integrity, Industry & Innovation

**CHIEF PATRON Prof. S. Subbiah** Vice-Chancellor

**PATRON Dr. V. Balachandran** Registrar i/c

#### **EDITOR IN CHIEF**

**Dr. E. Ramaraj** Professor & Head i/c

#### **ASSOCIATE EDITOR**

**Dr. A. Padmapriya** Associate Professor

#### **EDITORIAL BOARD**

Dr. K. Kuppusamy Professor Dr. T. Meyyappan Professor Dr. S. S. Dhenakaran Professor Dr. S. Santhosh Kumar Assistant Professor

#### **TECHNICAL AND EDITORIAL ASSISTANCE**

FACULTY Mr. K. Anbazhagan Sr. System Programmer Dr. N. Gnana Sankaran Teaching Assistant Ms. V. Vinothini Teaching Assistant Ms. M. Suguna Sundari Clerical Assistant

# Ph.D SCHOLARS

Ms. J. Mahalakshmi Ms. P. Subhasri Ms. V. Mary Kiruba Rani Ms. K. Berlin

#### **STUDENTS**

Ms. S. Kalaiselvi (II M.Sc) Ms. I. G. Bhagavathi (I M.Sc)



#### ACKNOWLEDGEMENT

First and foremost, we would like to extend our sincere gratitude and thanks to our honorable **Vice-chancellor Prof. S. SUBBIAH**, for his constant motivation and support in every step taken by our Department. He is the motivator behind many innovative practices adapted in our University. *He always hopes for the BEST not the BETTER*. Also we would like extend our sincere thanks to our most respected **Registrar Prof. V. BALACHANDRAN**, for his encouragement and helping hand.

This Department E-Magazine is names as **ALU DCS Plug-ins**. In computing, a plugin (or plugin, add-in, addin, add-on, addon, or extension) is a software component that adds a specific feature to an existing computer program. When a program supports plug-ins, it enables customization. Personalization and customization are identified as the key factors for innovation in the Industry. Our Endeavour with each edition is to ignite the innovative minds of the youth today.

We would like to thank **Dr. M. Selvam**, **Coordinator-IQAC**, Alagappa University, for his valuable guidelines about the Department Magazine. We would like to thank our **Member Syndicate**, **Dr. J. Jeyakanthan**, Professor and Head, Department of Bioinformatics for his suggestions. We extend our sincere thanks to the **Controller of Examinations**, **Dr. H. Gurumallesh Prabu**, who released this first issue of our Department's quaterly E-Magazine **ALU DCS Plug-ins**, in our Alumni Meet held on 22-12-2016.

We would also like to thank our Professor and Head **Dr. E. Ramaraj**, for always taking efforts in implementing creative ideas from staff as well as students of our Department. Lastly we would like to thank all the faculty members, research scholars, students, alumni and all stake holders for their valuable inputs.

Dr. A. Padmapriya Associate Editor & ALU DCS Plug-ins Team

# TABLE OF CONTENTS

| Acknowledgment                           | 6       |
|--|---------|
| Message from the Editor in Chief         | 8       |
| University Schemes for Students/Scholars | 9       |
| Department Events                        | 10 - 33 |
| Achievements                             | 34 - 36 |
| Involvements / Participations            | 37 - 40 |
| Alumni                                   | 41 - 43 |
| Industry                                 | 44 - 46 |
| Visitors Page                            | 47 - 48 |
| Staff contributions                      | 49 - 50 |
| ALUMNI Association                       | 51      |
| Technology Trends                        | 52      |
| Student's Page                           | 53 - 67 |



#### **MESSAGE FROM THE EDITOR IN CHIEF**



**Dr. E. Ramaraj** Professor & Head i/c Department of Computer Science

This is a self-effacing attempt from the Department of Computer Science towards articulating its ideas and visualizing possibilities for prospering in the contemporary world. Life without Computers is unimaginable. It has become an inevitable part of human life. This has not happened in one day. It has taken decades to come to this stage of growth, colossal work behind it from Scientists, Mathematicians, Technicians, and Engineers from various disciplines.

This edition is full of exciting plug-ins from staff, students, scholars. We have also included certain plug-ins from the Industries as well as alumni. I would also like to thank every member of the **ALU DCS Plug-ins** team, without their contribution, this issue would not have been possible. I hope you enjoy reading this magazine as much as I enjoyed working towards its creation and more importantly, I hope that the plug-ins may pave the path for igniting young minds.

# **UNIVERSITY SCHEMES FOR STUDENTS / SCHOLARS**

# **AURF Project Fellowship**

Ms. J. Mahalakshmi Ph. D Scholar

# **EARN WHILE YOU LEARN**

Mr. I. Chandrasekar II M. Sc

# **FEE WAIVER**

G. Pradeepa I M. Sc

S. Malarvizhi I M. Sc

#### **ALUMNI BATCH MEET**



The Alumni Meet of M.Sc (Computer Science) was organized by the Department of Computer Science on <u>08-07-2016</u> at 2 p.m. in the Alagappa University Convocation Seminar Hall. The Alumni meet was presided over by **Prof. V. Balachandran**, **Registrar i/c** of Alagappa University.

In the Inaugural session, Professor Dr. E. Ramaraj, Head i/c of Computer Science Department welcomed the gathering. He thanked the Honorable Vice Chancellor, for encouraging the Department of Computer Science in organizing the function. He extended a very warm welcome to the first batch M. Sc (Computer Science) (1991-1994) evening programme students for their special effort to meet themselves in the educated campus for sharing their experiences and views after 22 years.

After lighting the Traditional lamp, Prof. V. Balachandran, Registrar i/c disclosed his presidential address that the Alumni meet was of greater importance and more significant for any educational institution. This is the *first function* being organized by the Department *in the Academic year 2016-2017*. The Alumni of Department of Computer Science have been emerged in leading roles as IT Professionals, Educationist, Scientists, Authorities in Government, Entrepreneurs etc and spread across the Globe.

This event is an evidence for the dream of our Founder, Great Philanthropist, Eminent Educationist, **Padma Bhushan Vallal Dr. RM. Alagappa Chettiar**. While remembering about Vallal Dr. RM. Alagappa Chettiar, he embroidered three key words in his coat. They are "*Integrity, Industry, and Innovation*". He also added that this kind of collaborations and contributions from the Alumni and Department will elevate and motivate the current students.



Dean - Faculty of Science, Prof P. Manishankar, and Professor and Head of the Department of Computer Applications, Dr. V. Palanisamy, felicitated the function and stressed about the power of the Alumni and encouraged them to contribute for the Department.

In the Alumni address, Mr. Balaji Senthur, Associate Director, UBS, UK, thanked the Authorities of the Alagappa University in organizing an Alumni meet. Mrs. Sasikala Mahesh, Delivery Manager, Thought Works, Chennai, assured that as Alumni of the Department of Computer Science, they wanted to contribute to the Department in Curriculum designing, supporting in Campus recruitment and Counseling & Career Guidance to their juniors. She also thanked the Professor & Head, Dr. E. Ramaraj, for including Alumni as member of Board of Studies.



Prof. T. Meyyappan, Prof. S. S. Dhenarakan, Dr. A. Padmapriya, Dr. S. Santhosh Kumar and Mr. K. Anbazhagan extended their support for the success of the Alumni batch meet. Finally the Chairperson, School of Computer Science, Dr. K .Kuppusamy, proposed Vote of Thanks.



After the Inaugural session the Alumni interacted with the current students and gave career guidance. During the Interaction session, Ms. Usha Elizabeth, Delivery Manager, Cybage Software Pvt. Ltd, Pune, had a discussion on "Digital Transformation - Social, Mobility, Analytics, Cloud Computing". Mr. Prasad Chitta, Product Specialist, Tata Consultancy Services, Bangalore, shared his views about "Analytics and Big Data" with the students. Mr. N. Mohan Kumar, Lead Engineer from Converged Packet Optical Infrastructure, Ciena Corp, USA, interacted about "Software Defined Networking". Also questions were asked to the present set of students to test their caliber in computing.









The Alumni ascertained to strengthen their ties between former students and the Department, participating in the future development of the Department and preserving vision of the Department.

Report by Dr. K. Kuppusamy Dr. S. S. Dhenakaran Dr. A. Padmapriya

# NILAVEMBU KUDINEER: A SIDDHA DRINK BOOSTING IMMUNITY

As per the report of **15th Sep. 2016** in the Indian Express, the Tamil Nadu Government has conducted special monsoon Nilavembu Kudineer campaign for five days across the state. More than 10 lakh people have been given this herbal drink at the special monsoon Nilavembu Kudineer camps in Chennai alone to control viral fevers. Further, the State Govt. is recommending Nilavembu Kudineer for prevention and management of all types of viral infections or fevers.





Consequently, the Department of Computer Science, organized a Student's welfare Programme in Alagappa University Science Campus on 15-9-2016 at 10.30 a.m. to distribute Nilavembu Kudineer to the students and workers of this block to get benefitted of medicinal drink. This is being done to control the outbreak of dengue. Nearly 200 students from M.Sc(CS), MCA, M.Phil(CS), M.Sc(Physics), M.Sc(Biotech) etc., were served with this medicinal drink to get immunity against seasonal fevers

Report by Dr. S. S. Dhenakaran



By V. Sameswari and Team

# VILLAGE PLACEMENT PROGRAMME

The Department of Computer Science, Alagappa University, Karaikudi, has organized a three day Village Placement Programme [VPP] at Thiruvelankudi Village from **23-25**, **Sep. 2016** to the II Year M.Sc(Computer Science) students. This programme is one of the subjects in the curriculum of M.Sc programme. The students are put in stay at the village on these days and trained to study village habitats, people living pattern, their basic requisites, facilities available now etc.

Meanwhile Prof. S. Subbiah, the Vice-Chancellor of Alagappa University visited the school at the VPP camp and asked the students ambition and their immediate needs. He assured for sanctioning a computer system for the school, cricket tool kid and a carom board for the students to improve co-curricular activities.

Happy to say that Thiruvelankudi is one of seven adopted villages by our Hon'ble Vice-Chancellor, Alagappa University under the VPP programme. Due to the adoption scheme, village will get constant attention by Alagappa University also to improve facilities to the village. Thiruvelangudi village is located in Karaikkudi Tehsil of Sivaganga district in Tamil Nadu, India.



**Inaugural Function** 



Honorable Vice-chancellor interacting with school students & village people





*Socio- Economic Survey by Students* 

#### Yoga classes to school students

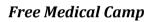




Donating Wall Clocks to the School



Tree Plantation







Temple Cleaning

As a part of the programme, Dr.S.S.Dhenakaran, Professor and Programme Co-ordinator has arranged events like training school students with Yoga Practices for two sessions, running Competition to students standard-wise, Quiz program testing talent of students with prizes to winners, sapling plantation inside the school, Donating five wall clocks to the school, cleaning village, interacting village people to collect data for analysis to yield future requirements, distributing Nilavenbu Kudineer to the village people, Free Medical camp organized by our Department and Kavery Mecial centre, Karaikudi and campaign for educating children etc. Since the village has no facilities for girls[98] to stay at Thiruvelankudi, the students were taken to Ona Siruvayal for their food and stay. Further, the students cleaned the temple in and around at Ona Siruvayal as one of the tasks in the programme. Also the faculty members of the Department actively involved and supported the students during VPP. The VPP programme has finished at the most satisfaction of the villagers. All the staff members of the Department participated in the programme.





# After the camp, the rejuvenate of the village is shown below.







The II M. Sc VPP Team

Report by Dr. S. S. Dhenakaran Dr. A. Padmapriya

# INTERNATIONAL WORKSHOP ON DATA SCIENCE & ANALYTICS

The Department of Computer Science, Alagappa University organized a Two-day International Workshop on "Data Science and Analytics" on <u>27 and 28th September</u> <u>2016</u> for students and college teachers. The programme started with invocation followed by lighting Kuthuvilakku. The function was presided over by Prof. V. Balachandran, Registrar Alagappa University. Dr. E. Ramaraj, Head, Department of Computer Science welcomed the gatherings and honored Chief Guest and Registrar. Dr. K. Kuppusamy presented thematic address of International workshop on "Data Science and Analytics".

Prof. V. Balachandran, Registrar, Alagappa University, in his presidential address, pointed out the growth of big data in industries and how it is handled to assess the behavior of consumers in providing better services to them. He also outlined the growth of big data day by day in peta bytes and mentioned some applications like Banking, transporting, finance and self-driving cars using Big data and analytics.

Prof. S.R.Subramanya, National University of San Diego, California, USA delivered inaugural address by quoting the concepts and real examples on data science and analytics.



Dr.P.Manishankar, Dean of Science, revealed ranking of Alagappa University in short listed 29 Universities through quality research publications which helped to receive grants from Department of Science and Technology. In his felicitation address, he pointed out the role of Data Science and Analytics in computing citation index of Research Publications and ranking of Institutions based on the research contributions.

Dr. J. Jeyakanthan, Member Syndicate, Professor and Head, Dept. of Bio-Informatics, emphasized that not industries but also Biological Sciences generate big data. The results of Big Data Analytics in Biological Sciences help to identify genome structure. He appealed to the students about abundant employment opportunities in biological discipline due to big data generation.

Dr. K. Gurunathan, Member Syndicate, Dr. H. Gurumallesh Prabhu, Controller of Examinations, University Faculty members, students and research scholars are also participated. Dr. A. Padmapriya proposed vote of thanks.

Dr. P. Herbert Raj, Institute of Brunei Technical Education, Brunei Darussalam, delivered a lecture through Video conferencing on "Cloud Computing and Data Analytics". On the second day of the workshop Dr. P. Rajesh Devadas, CEO, BTREE Labs & Pustaka Digita Media, Bangalore, conducted the Hands-on Session in "Amazon & Cloud Computing". He also demonstrated about functioning of Amazon web services. Prof.F. Sagayaraj Francis, Pondicherry Engineering College, delivered a lecture on "Research Trends in Big Data Analytics".



Video Conferencing from Brunei

In the valedictory function, Dr. A. Narayanamoorthy, Dr. K. Gurunathan, members of syndicate, delivered the Presidential and Valedictory addresses. Dr. T. Meyyappan presented the workshop report and Dr. S. S. Dhenakaran, proposed vote of thanks.



Dr. A. Padmapriya - Organizing Secretary of this International workshop, Dr. S. Santhosh Kumar-Coordinator, Mr. K. Anbazhagan, Dr. N. Gnana Sankaran and research scholars have made elaborate arrangements.

Report by Dr. K. Kuppusamy Dr. T. Meyyappan

#### NATIONAL SEMINAR ON ADVANCES IN COMPUTER SCIENCE

The Department of Computer Science has organized a two-day National Seminar on Advances in Computer Science on **21-22 October 2016**. Dr. E. Ramaraj, Professor and Head, Department of Computer Science welcomed the gathering. The honorable Vice Chancellor Prof. S. Subbiah delivered presidential address.



In his presidential address he addressed that Indian students studying abroad are brilliant in answering questions raised by teachers in any subject of study . It is because of well framed schooling system in India comprising all the subjects compared to the system with specialized subjects followed by foreign countries. Students from India are very strong in Computer Science because they are strong in mathematics. Moreover, young students in foreign countries wish to become Computer Science graduates from Indian Institutions like Alagappa University, he added. He emphasized that, if the students become Computer Graduates, they can excel in any field. He also added that, World class smart class rooms cum laboratories are provided to the Computer Science and Computer Applications students of Alagappa University on par with foreign countries in order to become a model to other institutions in India.



PL. Subbiah, CEO of Egston Electronics India Private Limited, Trichy delivered the inaugural address. In his speech, he stressed the importance of conducting seminars for providing experience and sharing knowledge and advance thinking of young students beyond curriculum boundaries. He appealed to the students to think beyond the minimum curriculum requirements and cope up with the rapid advancement of technology as the market demand for computer experts is on the rise.

Dr.R. Gokula Krishnan, Joint Director STPI (Software Technology Park of India) Chennai, delivered special address on "Digital Technologies and Eco Systems in India". Dean, faculty of Science, Prof. Manishankar felicitated and pointed out how quantum computers can achieve efficiency in operations by replacing carbon with silicon material in its infrastructure which is recent advancement in quantum computing that solves problems which are not solved by traditional computing systems.

Prof. J. Jeyakanthan, member of syndicate, faculties from various departments, students, research scholars and college teachers have participated. Nearly 250 participants attended the seminar and 54 papers are presented. Three best papers are selected and given best paper awards. Finally, Dr. S.Santhoshkumar, Organizing secretary of the seminar proposed vote of thanks.



#### Video Conferencing & Interaction Session



#### Paper Presentation Session







In the valedictory function, Dr. E. Ramaraj, welcomed the gathering. The most respected Registrar Prof V. Balachandran delivered the Presidential address. Dr.N.P.Gopalan from NIT, Trichy delivered the valedictory address. The CEO of Ascenders, Dr. K. Thirugnanam and Dr. V. Palanisamy, Dean-Student Affairs, offered their felicitations. Dr. T. Meyyappan, Coordinator of the National Seminar presented the Seminar report. The Best paper award was given to three best paper presenters. Dr. K. Kuppusamy, proposed vote of thanks.

Report by Dr. K. Kuppusamy Dr. S. S. Dhenakaran

# PARENTS TEACHERS MEET

The Department has organized its first Parents Teachers meet for this academic year on **08-11-2016** at Seventh floor Seminar hall, Science campus at 10:30 AM. The reason for this meet is to create a common platform, where parents and teachers come together to share their experience for enriching students education.

Dr. E. Ramaraj, Professor and Head, Department of Computer Science extended a warm welcome to the parents. Nearly 60 parents attended the meeting. Dr. A. Padmapriya, Organizing Secretary of this event elaborated the purpose of this meet and invited the faculty members to express their views about the students to their parents.



The Head of the Department narrated about the schemes for students introduced by honorable **Vice chancellor Prof. S. Subbiah** such as *Merit Scholarships, Earn while you learn, Complete Fee Waiver Scheme and AURF project fellowship*. The parents recorded their gratitude to our honorable Vice chancellor for introducing such schemes for the welfare of the students.

Dr. T. Meyyappan, Dr. S. S. Dhenakaran, Dr. S. Santhosh Kumar and Mr. K. Anbazhagan shared their views about the students and recorded the importance of commitment in studying, need for improving the communication and skill set of the students. They also explained the measures taken by the staff such as ICT based teaching, establishing hi-tech laboratory for students, mentoring them, workshops, seminars, guest lectures arranged to improve the competencies of the students.







The parents appreciated the efforts taken by the staff in improving the competencies of the students and guiding them in the right direction. The parents then recorded their suggestions such as bus stopping in front of the Science Campus, and motivating their children toward research as well as job opportunities. The felt very happy that they have chosen the right place for their children's higher education.







After the meeting, the requirement for the bus stopping in front of the Science Campus is conveyed to the administration. Our honorable Vice chancellor have taken steps related to the issue earlier and purchased a bus for the University. It is used for trips around the University campus, bus stands and railway stations from Dec 2016 onwards. Now our students are utilizing the University bus.

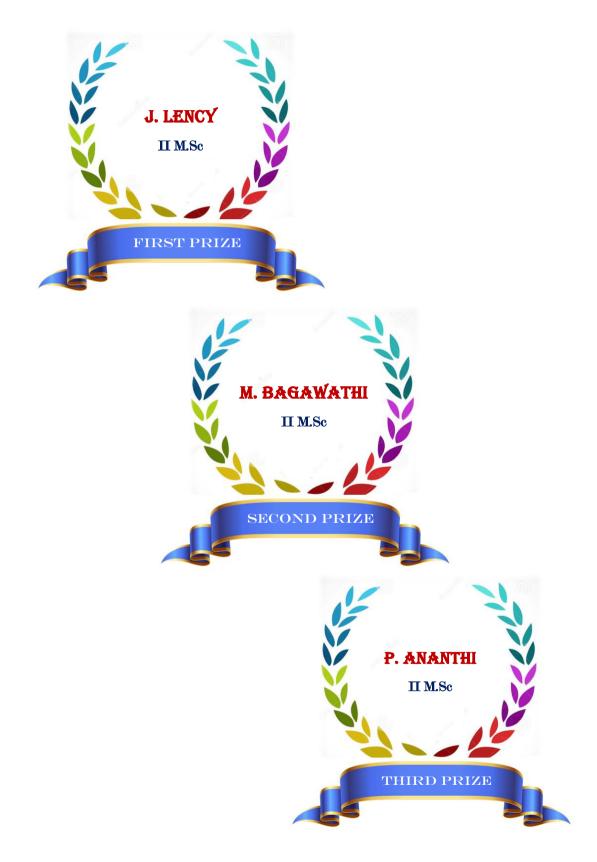
Report by Dr. A. Padmapriya Dr. S. Santhosh Kumar





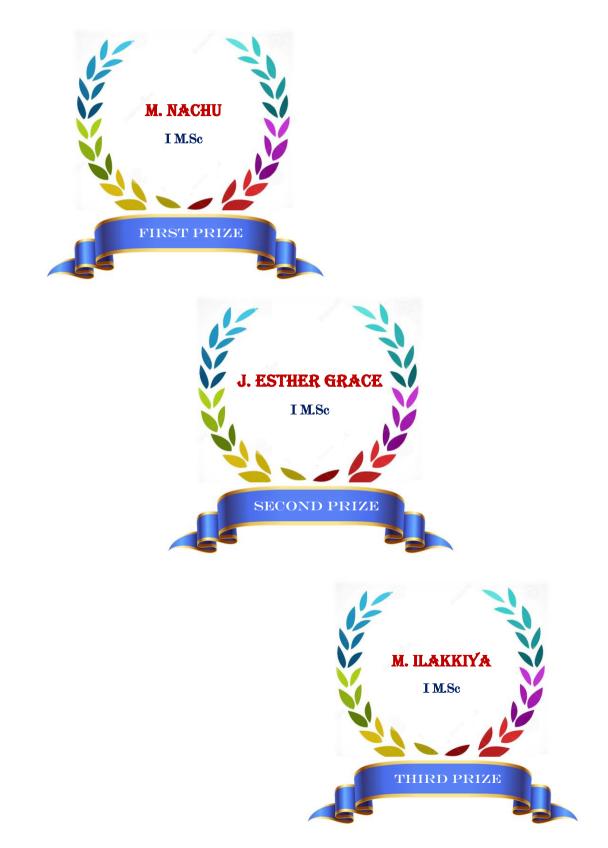
# ACHIEVEMENTS

# **PMT & VOC MERIT SCHOLARSHIP WINNERS**



# **ACHIEVEMENTS**

# **PMT & VOC MERIT SCHOLARSHIP WINNERS**



# **INVOLVEMENTS/PARTICIPATIONS**

Our Students and staff were actively involved in the programmes organized by out Department as well as by other Departments in the University.





Involved in Campus Cleaning Campaign at Science Campus on 12-8-16

By NSS

# **INVOLVEMENTS / PARTICIPATIONS**



Fresher's Day on 23-8-16



Expert Lecture about Best Practices in Software Engineering by Prof.Baskaran, Anna University on 30-09-16

By Department of Computer Science

Alagappa University Talent Exhibit Show (ALUTES)

from 3-10-16 on 5-10-16

**By Cultural Club** 

Eye Camp

on 5-10-16

By Department of Bioinformatics

# **INVOLVEMENTS / PARTICIPATIONS**



Saraswathi Pooja Celebrations in the Department on 7-10-16

Training on PHP and MySQL by Mr. S. Ganesan, GK Infotech on 13-10-16 & 14-10-16 (2pm-5pm)

> By Department of Computer Science

Aptitude Test for Internship at Algorics, Bangalore on 13-10-16(FN)

By Department of Computer Science



Video Conferencing interaction with Nuclear Scientist Elanchezhian in USA about Machine Learning on 14-10-16(FN) By Department of Bioinformatics

# **INVOLVEMENTS / PARTICIPATIONS**



Awareness on Fire and Safety on 20-10-16 By Department of Bioinformatics

Selection Interview for Internship at Algorics, Bangalore on 1-12-16

By Department of Computer Science

(Four students are shortlisted)

Awareness Programme on Digital and Cashless Transactions for NSS volunteers on 19-12-16

By NSS (Launch of VISAKA campaign at Alagappa University)

Ph. D viva voce for Mrs. P. Pandiselvi Candidate of Prof. T. Meyyappan External Examiner Dr. M. Thangaraj, MKU on 19-12-16

**By Department of Computer Science** 

# ALUMNI



**Prof. C. Annamalai** UMS-MOHESR Dubai, United Arab Emirates

Being one of the Alumni of the first batch of M. Sc Computer Applications, it gives me a pleasure and proud to be the product of Department of Computer Science, Alagappa University, Karaikudi.

When I think back, all I remember was the time I spent in the computer lab with my peers. And the most fun we had was during the lab hours, it would all get chaotic and we would have a lot of laugh.

Due to the guidance given by the faculty members, I have learned a lot and put all theory into practice. With the faculty member's blessing, I am in a position to go to the highest level in my career both in the Academic as well as in the Industry also.

As long as the students were interested, the faculty members always motivate them. Furthermore, they are highly dedicated and spent long hours in the computer lab to provide excellent support at all times. I am still maintaining good relationship with all my teachers because they are in a position to provide excellent support and share their valuable guidance even after graduation.

All my batch-mates were settled very well. Have fun and make the most out of your experience through active learning. You will have the most fun during University years, so appreciate the time. Don't be afraid of taking on more experiments during your studies. This is the time to reconnoiter so take the time to explore as much as possible this includes doing final year projects, experimenting with different tools and programming languages and so on. Once you graduate, please look for opportunities both in India and abroad. It is my pleasure to provide more information in case of any assistance required.



**S NATARAJAN** Assistant General Manager Bank of Maharashtra, Chennai

Greetings for the Day to all Ladies and Gentlemen.

About me a few words: Myself, <u>S Natarajan</u>, son of N Sambasivan Iyer, studied in first batch (1991) of Msc Computer Science(Evening) in ALU KKDI, worked in LIC of India for 8 years in developing various Life Insurance applications using COBOL and C under Unix till Nov'2001, then worked in Oriental Bank of Commerce Delhi in developing various Banking related applications using Visual Studio as well as in CBS project for 5 years till Nov'2006, then worked in Bank of Maharashtra IT department in developing various areas of Banking using ASP / .Net, Oracle and MS-SQL till Nov 2011, then handled various IT projects including CBS as team leader till July 2014, then subsequently moved to Banking field operations in Assistant General Manager cadre as Chennai Branch manager of Besant Nagar Bank of Maharashtra.

Out of 40 students of first batch of 1991 MSC, unfortunately, we lost 2 to heaven at young age. After lot of efforts, all 38 were able to locate each other and started Whatsapp group since 15.11.2014 for first batch students. After lot of planning and discussion among them, and based on Alagappa University - Computer Science Department guidance, we were able to meet as reunion on 8<sup>th</sup> July'16 at Convocation Seminar hall, ALU, KKDI and Tappa Gardens as well. That meeting was a seed for ALUMNI startup at ALU. Great support and guidance received from Department of Computer Science, ALU for conducting this meeting.

# ALUMNI

*Regarding future plans, I put-up the following points:* 

- (1) Alumni extension for including all subsequent batches into ALUMNI association
- (2) Alumni association has to start its own web portal, in which regular updates and various posts to be arranged for helping / upgrading the knowledge of current students / old students so that right carrier path may be chosen by them. FAQ style posting, new job opportunities, new trends / developments in IT field, etc may be posted in this portal.
- (3) All alumni members should be given a login user-id and password so that their profile details may be available for editing and viewable for other members.
- (4) Alumni association has to keep a bank account by maintaining the fund collected by way of life time / yearly subscription from Alumni members.
- (5) Regularly pre-scheduled meetings to be arranged by alumni association so that maximum members will participate in the meeting. The communication may be sent thru the registered email-ids and mobile numbers.
- (6) Alumni team has to work-out for placing suggestions to ALU for continuous updation of syllabus as per industry requirements.
- (7) Campus recruitment may be explored as various ALUMNI members are working across world and through the HR team of their respective institutions.
- (8) From the Alumni fund, various scholarship programs may be started for helping financially poor students currently studying if they are meritorious also.
- (9) As a broader social cause and as a model / pilot one to other alumni associations in the country, ALU Alumni association may try for persuading the government authorities with the help of ALU for arranging free education for all students till PG.
- (10) Ultimate goal of Alumni association may be for helping to ALU, to bring out the students from ALU, on completion of course, as a knowledgeable, employable, corrupt free good citizen to our great country.

I assure here that I will try to help the students at my level best thru ALUMNI, out of my experience.

Jai Hind. Jai ALU.

With Regards **S Natarajan** / 20<sup>th</sup> December 2016 Mob. 9344511429 <u>gansanvar@gmail.com</u>



# Dr.R.GOKULAKRISHNAN Joint Director/Scientist D Software Technology Parks of India Ministry of Electronics and IT (MeitY) Govt., of India

University education is about how to think, exercising some degree of control over your thoughts and choose attention towards good life. Our thoughts affect our realities and the ability to choose life attributes. We must learn from our and others genuine experiences. Hence, construct meaning from experience; it will determine the right drive towards optimum destination.

Ramayana and Mahabharata are two great epics gifted by our tradition, these two epics not lifted any religion and sentiments, it contains ocean of science and related abstracts. Further Indian literature creates knowledge banks and Alagappa University greatly maintaining good library.

Learning is a continuous process. It's a moral duty because it's only through continuous learning that we can add to the vast knowledge of mankind. If we stopped learning, progress in all industries—computers, finance, engineering, biology, stops as well.

Further learning social psychology from university education is equally important with technology learning. Because Someday, we all forget the hurt, the reason we cried and who caused us pain, we will finally realize that the secret of being free is not greedy, but letting things unfold in their own way and own time. After all, what matters is not the first, but the last chapter of our life which shows how well we ran the peace, so smile, laugh, forgive and love all over the environment again and again.

# INDUSTRY

I believe that History can trigger innovation, our country has lakhs of IT Professionals and creators and I visualise a need for a holistic development of their minds. Our University will bring you that level. Wisdom acquisition is a moral duty. It's not just something you do to advance in life.

Always try to convince others that you are doing full justice with the life in which you are occupied.

E-mail: r.gokul@stpi.in Mobile : 09841090710



A.Thasil mohamed Project manager CAPE GEMINI India Pvt Ltd Banglore

Dear students!

I feel very happy share my thought with you in this magazine. The new buzz word in this era is **Computational Thinking**. It is a innovative way of activity based learning with creativity. In this activity, no instructions are provided. Instead, students will use examples of what imaginary players have done to figure out how to play the game. According to Jeannette Wing, envisioned computational thinking becoming an essential part of every child's education. Today most of the leading institutions introduced smart way of learning by using sophisticated teaching and learning equipments. This technology provides self determination and motivation of rational thinking by that a student can enrich their own potential in computer skills moreover these skills are most wanted in software industry.

# VISITOR'S PAGE

I attended an International Conference here on April 2016, and am here now for an International Workshop on Data Science and Analytics.

The enthusiasm, vision, and encouragement of the honorable Vice chancellor Prof. S. Subbiah are noteworthy. The faculties that I have interacted with are dedicated and friendly. I wish the Computer Science Department and Algappa University to reach greater heights in higher education and its beneficial impacts on society.



It's pleasure attending the National Seminar event. Amazing talents and papers presented. I wish Department of Computer Science the best of achieving greater heights and value adds to this University, which is created by the "Greatest human as the world" Dr. Alagappa.

> **Dr.K.Thírugnanam** Founder and CEO Ascenders Technologíes Pvt. ltd. Chennaí

I am very much proud about my University. I feel great in association with the University Computer Science Department staff for upliftment of student life. Further, new dimension energetically understood by way of interaction with University students, especially under the leadership of Vice chancellor, "Best social responsibility from ALU"

> **Dr. R. Gokulakríshnan** Joint Director / Scientist D Software Technology Park of India Ministry of Electronics and IT Chennai



I really enjoyed delivering the session to your students and surprisingly lot of students were very keen to understand. They listened very carefully and many were very interactive as well. They asked questions which are very relevant to the recent trends about the session. Overall, I was very happy and I wish all the students very best for the future!!

> **Dr. Rajesh Devadas** Founder and CEO B Tree Labs Bengaluru

# STAFF CONTRIBUTIONS

# **RESEARCH PUBLICATIONS**

|                       | National   | International | International |
|-----------------------|------------|---------------|---------------|
| Name                  | Conference | Conference    | Journal       |
| Dr. E. Ramaraj        | 2          | 1             |               |
| Dr. K. Kuppusamy      | 1          |               | 1             |
| Dr. T. Meyyappan      |            | 1             | 1             |
| Dr. S. S. Dhenakaran  | 2          |               |               |
| Dr. A. Padmapriya     | 1          | 1             | 1             |
| Dr. S. Santhosh Kumar | 2          | 2             |               |

From June 1 to December 22, 2016



# **FOREIGN VISIT**

Dr. T. Meyyappan, presented a research paper on "Genetic based method for association rule hiding" in the Seventh World Conference on IT at Bali, Indonesia during September 10-12, 2016.

## **GUEST LECTURES DELIVERED**

Dr. K. Kuppusamy delivered Valedictory Address and presented the certificates to the participants in the National Conference on "Recent Trends in Computer Science and Applications" at Rabi Ammal Ahamed Maideen College for Women, Tiruvarur on 24-09-2016.

Dr. T. Meyyappan, delivered an expert lecture on "Mobile Communication – Positive and Negative Impacts on Society", at Sri Venkateswara College for Women on 27-07-2016.

Dr. A. Padmapriya, delivered a talk on "Web Designing" in the COMAP Association function organized by the Department of Computer Applications, JJ College of Arts and Science, Pudukkottai on 31-08-2016.

Dr. A. Padmapriya delivered Inaugural Address in the State Level Seminar on "Recent Trends & Opportunities in IT" at Caussanel College of Arts and Science, Muthupettai on 26-09-2016.

Dr. S. Santhosh Kumar, delivered a talk on "Mobile Phones : Pros & Cons" in the Department Association Meeting organized by the Department of Computer Science & IT, Ananda College, Devakottai on 1-08-2016.

Dr. S. Santhosh Kumar, delivered a talk on "Data Mining : The Real world perspective" in the FOCAL Association Meeting organized by the Department of Computer Applications, Bharath College of Science & Management, Thanjavur on 10-08-2016



# **CONTRIBUTIONS ARE INVITED FROM THE ALUMNI**

| Account Name   | : | Alagappa University Computer Science<br>Alumni Association |
|----------------|---|--|
| Bank           | : | Indian Bank  |
| Branch         | : | AC Campus, Karaikudi                                       |
| Account Number | : | 6489723189   |
| IFSC Code      | : | IDIB000A008  |



**Plug-ins** 

# **TECHNOLOGY TRENDS**

**LAMP** is an archetypal model of web service stacks, named as an acronym of the names of its original four open-source components:

- ✓ Linux operating system
- ✓ Apache HTTP Server
- ✓ MySQL relational database management system (RDBMS)
- ✓ PHP programming language

The LAMP components are largely interchangeable and not limited to the original selection. As a solution stack, LAMP is suitable for building dynamic web sites and web applications.

**LYME** and **LYCE** are solution stacks composed entirely of free and open-source software to build high-availability heavy duty dynamic web pages. The stacks are composed of:

- ✓ Linux, the operating system
- ✓ Yaws, the web server
- ✓ Mnesia or CouchDB, the database
- ✓ **E**rlang, the functional programming language

The LYME and LYCE bundles can be and are combined with many other free and open-source software packages such as e.g. netsniff-ng for security testing and hardening, Snort, an intrusion detection (IDS) and intrusion prevention system (IPS), RRDtool for diagrams, or Nagios, Collectd, or Cacti, for monitoring.

**MEAN** is a free and open-source JavaScript software stack for building dynamic web sites and web applications. The MEAN stack is

- ✓ MongoDB
- ✓ Express.js
- ✓ Angular
- ✓ Node.js

Because all components of the MEAN stack support programs are written in JavaScript, MEAN applications can be written in one language for both serverside and client-side execution environments.

Source : Wikipedia

Compiled by Dr. A. PADMAPRIYA Associate Professor



# G.K. KARTHIKA II M. Sc (CS)

# GJf;ftpij

Mykukhk; vq;fs; mofg;gh gy;fiyf;fofKk; MzpNtuhk; vq;fs; JizNte;jH mjpy; fpisaha; vq;fs; fzpdpj; Jiw fpisia jhq;Fk; tpOJfshk; vq;fs; NguhrpupaHfs; mwpT grp Njb miye;j gwitfshd vq;fSf;F fzpdp fy;tpNahL fiyfis fw;Wj; je;jJ vq;fs; Jiw ey;y ez;gu;fNshL el;G g+f;fSk; g+j;jd ,e;j ,uz;L Mz;LfhyKk; ,dpikaha; fiwe;jd. ,d;Dk; Mapuk; Mz;Lfs; MdhYk; mwpTj; jpUf;Nfhtpyha; t{w;wpUf;Fkhk; vq;fs; mofg;gh gy;fiyf;fofk;.

# G. fzgjp ,uz;lhk; Mz;L> fzpdp mwptpay; Jiw



M. PARIMALA I M. Sc (CS)

# **TECH BITS**

| Alpha              | 1.0         |
|--------------------|-------------|
| Beta               | 1.1         |
| Cupcake            | 1.5         |
| Donut              | 1.6         |
| Eclair             | 2.0 – 2.1   |
| Froyo              | 2.2 – 2.2.3 |
| Gingerbread        | 2.3 – 2.3.7 |
| Honeycomb          | 3.0 - 3.2.6 |
| Ice Cream Sandwich | 4.0 - 4.0.4 |
| Jelly Bean         | 4.1 - 4.3.1 |
| KitKat             | 4.4 - 4.4.4 |
| Lollipop           | 5.0 - 5.1.1 |
| Marshmallow        | 6.0 - 6.0.1 |
| Nougat             | 7.0 – 7.1   |

Do u know that from Cupcake to Nougat are taken from sweets and other eatables. YUMMY Android!!!

*Short Bytes:* Microsoft's recent announcement to join the Linux Foundation has stirred news waves around the world. Assumptions are made that this is Microsoft's strategy to kill Linux. However, executive director of the Linux Foundation, Jim Zemlin said that Microsoft is a changed company now. – Source: fossbytes.com

Plankalkül is a programming language designed for engineering purposes by Konrad Zuse between 1942 and 1945. It was the first high-level (non-von Neumann) programming language to be designed for a computer. John von Neumann was a Hungarian-American mathematician, physicist, and computer scientist. Creator of Neymann Architecture which still-in-uses.

You know wikipedia. Right? Now let's know about their siblings too! Wiktionary, Wikiquote, Wikibooks, Wikisource, Wikimedia Commons, Wikispecies, Wikinews, Wikiversity, Wikidata, Wikivoyage, Wikimedia Incubator, Meta-Wiki. U name it; they got it!!!

# Programming Languages and their Founders

- 1) Java James Gosling.
- 2) C Dennis Ritchie.
- 3) C++ Bjarne Stroustrup.
- 4) Python Guido van Rossum.
- 5) PHP Rasmus Lerdorf.
- 6) Perl Larry Wall.
- 7) JavaScript Brendan Eich.
- 8) Ruby Yukihiro Matsumoto.
- 9) Lisp John McCarthy
- 10) Pascal Niklaus Wirth

# By Kanagaraj N Ph. D Scholar



Photography by Kanagaraj N Ph. D Scholar

# **COMPUTER SHORTCUTS**

- Ctrl + A Select all in the current document
- Ctrl + B Bold text
- Ctrl + C Copies the item
- Ctrl + D Displays the Font Dialog box
- Ctrl + E Center Alignment
- Ctrl + F Displays the Font dialog box, to search the current document
- Ctrl + G Displays the Go To dialog box, to go to a specific location in the current document
- Ctrl + H Displays the Replace dialog box
- Ctrl + I Italic Text
- Ctrl + J Full Justification
- Ctrl + K Create Hyperlink
- Ctrl + L Left Alignment
- Ctrl + M Tab
- Ctrl + N Creates a new document
- Ctrl + O Displays the open file dialog box
- Ctrl + P Displays the print dialog box
- Ctrl + R Right alignment
- Ctrl + S Displays the save dialog box
- Ctrl + T Find next
- Ctrl + U Underline Text
- Ctrl + V Paste the copied item
- Ctrl + W Submit window
- Ctrl + X Cut the item or text
- Ctrl + Y Redo the last undone action
- Ctrl + Z Undo the last action

## By

R.Venkateswari I M.Sc (CS)

## Mirapy; XH ftpij

md;W **A for Apple** vd;W gbj;Njd; ehd; ,d;W **A for Abdul kalam** vd;W gbf;fpuhHfs; Mapuk; tpsf;Ffs; vupa – xU **j{f;Fr;rp** NghJk; Mapuk; g+f;fs; kyu – xU **tpij** NghJk; Mapuk; tpQ;Qhdpfs; tsu – xU **mg;Jy;fyhk**; NghJk; Mapuk; khztu;fs; gpufhrpf;f – Xu; **Mrpupau**; NghJk;.

## S. kyHtpop Kjyhk; Mz;L> fzpdp mwptpay; Jiw



R. SARANYA II M. Sc (CS)

# ngupNahH vd;Wk; ngupNahNu

NguwpQH mz;zh mtHfs; rpfpr;irf;fhf mnkupf;fhTf;;F nrd;w NghJ Nghg;ghz;ltiur; re;jpf;f Ntz;Lk; vd;W Nfl;lhuhk;. mq;Fs;s gpugyq;fs; mtuJ nfhs;if u{jpahfr; re;jpf;f fLikahf vjpu;g;Gj; njuptpj;jhu;fshk;. xU topahfr; re;jpg;Gf;F top fpilj;j NghJ mz;zh mtuplk; ,e;jpah Rje;jpukile;J gy Mz;LfshfpAk;> Nfhth> Nghu;r;Rf;fy; ehl;bd; trkpUe;jij k{l;fg; Nghuhb md;dpauhy; rpiw gpbf;fg;gl;l t{uid ntspapy; vLf;f Nfl;Lf; nfhz;lhuhk;. mtUila Ntz;LNfhis Vw;w Nghg; mtidr; rpiwapypUe;J t{ud; ntspapy; te;jTld; tpguk; njupe;J ed;wp ngUf;Fld; mz;zhitr; re;jpf;f tpiue;jhH. Mdhy; mg;NghJ mz;zh ,t;Tyfpy; ,y;iy.

A. ngdhr{u; Kjyhk; Mz;L> fzpdp mwptpay; Jiw



KARTHIKA. GK II M. Sc

# fz;zjhrdpd; ftpij Jspfs;

"fly; msT fpilj;jhYk; kaq;fkhl;Nld; - mJ ifasNt MdhYk; fyq;fkhl;Nld; cs;sj;jpNy cs;sJjhd; cyfk; fz;zh – ,ij czHe;J nfhz;Nld; Jd;gnky;yhk; tpyFk; fz;zh".

"ghQ;rhyp cd;dplj;jpy; NriyNfl;lhs; me;j ghHj;jdtd; cd;dplj;jpy; f{ij Nfl;lhd;! ehdpUf;Fk; epiyapy; cd;id vd;d Nfl;Ngd; - ,d;Dk; ed;ik nra;J Jd;gk; thq;Fk; cs;sk; Nfl;Ngd; !"

" fyf;fk; xt;nthU t{l;bYk; ,Uf;fpwJ.
ftiy xt;nthU neQ;rpYk; ,Uf;fpwJ.
mtw;wpd; epwk;NtW> epiyNtW> rhNt>
,y;yhj t{Lk;> rQ;ryNk ,y;yhj>
kdKk; ,d;Dk; rpU\pbf;fg;gltpy;iy fz;zh".

# M. ehr;R Kjyhk; Mz;L> fzpdp mwptpay; Jiw



R. VIJITHRA I M. Sc (CS)

## **LIFE TO ME**

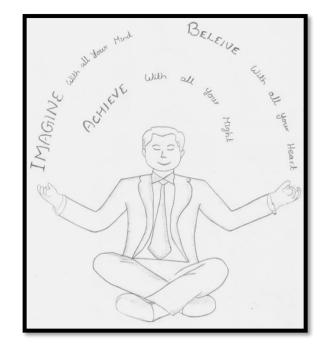
A Doctor Said, "Life is Patience" A Lawyer Said "Life is an Argument" A Poor man Said "Life is Poverty" A Rich man Said "Life is Money" A man in a cage Said "Life is Bondage" A Soldier in a Battle Said "Life is Freedom" A Player Said "Life is Game" A Goldsmith Said "Life is precious" A Musician Said "Life is Melody" But I Said "Life is Still a Mystery"

## By

M.Nachu., I M.Sc (CS)



S. ATCHAYA II M.Sc (CS)



B. JEYA GOWRI II M. Sc (CS)

# **2016 - NOBEL PRIZE WINNERS**

| Physiology or Medicine - |   | Yoshinori Ohsumi  |
|--------------------------|---|---|
| Physics                  | - | David J.Thouless<br>F.Duncan M.Haldane<br>J.Michael Kosterlitz    |
| Chemistry                | - | Jean.Pierre Sauvage<br>Sir J.Fraser Stoddart<br>Bennard L.Feringa |
| Peace                    | - | Juan Manuel Santos  |
| Economic Sciences        | - | Oliver Hart<br>Bengt Holmstrom                                    |
| Literature               | - | Bob Dylan   |
| Bv                       |   |   |

**By.,** I.G.Bagavathi., I M.Sc (CS).

# **MULTIPLICATION SHORTCUTS**

1) Multiplication with 5

#### CASE: 1

18 x 5 =18/ 2=9=90 24 x 5= 24/2 =12=120 46 x 5= 46/2 =23=230 54 x 5 = 54/2= 27=270

The answer is whole number, and then added a zero after the number.

95 x 5=475 752 x 5= 3760

#### CASE: 2

21 x 5 = 21/2= 10.5=105 23 x 5=43/2= 21.5= 215 97 x 5= 97/2=48.5=485 925 x 5= 925/2=462.5=4625

The answer is decimal. Remove the points of after decimal.

2) Multiplication with 15

## CASE: 1

36 x 15= 36/2=18+36=540 44 x 15= 44/2= 22+44=660 96 x 15= 96/2=48+96=1440 82 x 15=82/2=41+82=1230 94 x 15= 94/2= 47+94=1030

The answer is added with the main number. Add Zero after the answer.

#### CASE: 2

47 x 15= 47/2= 23.5+47=70.5=705 55 x 15=55/2=27.5+55=82.5=825 91 x 15= 91/2= 45.5+91=136.5=1365 87 x 15= 87/2=43.5= 43.5+87=1305

The number is added with the main number and removes the decimal point.

## **SQUARE ROOT OF ABOVE 100**

```
101^2 = (101+1) + 1^2
     =102+01=10201
102^2 = (102 + 2) + 2^2
     =104+04=10201
103^2 = (103+3) + 3^2
     =106+09=10609
104^2 = (104+4) + 4^2
     =108+16=10816
105^2 = (105+5) + 5^2
     =110+25=11025
109^2 = (109+9) + 9^2
     =118+81=11881
110^2 = (110 + 10) + 10^2
    =120+100=12100
111^2 = 12321
11112=1234321
111112=123454321
1111112=12345654321
```

## **SQUARE ROOT ONLY ENDS WITH 5**

```
15^{2} = (1 \times 2) + 25 = \underline{2} \ 2525^{2} = (2 \times 3) + 25 = \underline{6} \ 2535^{2} = (3 \times 4) + 25 = \underline{12} \ 2545^{2} = (4 \times 5) + 25 = \underline{20} \ 25
```

```
55^{2} = (5 \times 6) + 25 = <u>30</u> 25

65^{2} = (6 \times 7) + 25 = <u>42</u> 25

75^{2} = (7 \times 8) + 25 = <u>56</u> 25

85^{2} = (8 \times 9) + 25 = <u>72</u> 25

95^{2} = (9 \times 10) + 25 = <u>90</u> 25

105^{2} = (10 \times 11) + 25 = <u>110</u> 25
```

```
By
B.Jeya Gowri
II M.Sc CS
```

# கோபம்

யார் எறிந்த அம்போ முட்கிரீடம் கைக்கிறது என் இதயத்தில் ! தொடுத்தது யாரோ எவரோ என நான் அறியேன் ! வாணலியில் வெடித்துச் சிதறும் சிறு கடுகெனக் குறுகுகிறது கண்கள் ... கத்தரி வெயிலினும் அதிகமாய், அனல் தெறிக்க உள்ளுக்குள் உலை கொதிக்கிறது... பருக்கிப் பஞ்சென புடைத்து விம்முகிறது தன்மானம் ! எந்நேரமும் வெடித்துச் சிதறி யார் காலில் மிதிபட்டு நைந்து போகவோ – நானறியேன்... கோபம் யார்பால்?? பெண்களை ஆணவமாய் ஆட்டுவித்து, அவர்களின் சுயமரியாதையினை அசைத்துப் பார்க்கும் ஆண்களின் மீதும் ; ஆண்களை அடிமைகளாக பாவிக்கும் பெண்களின் மீதும்; கோபம் ! மனத்தின் வாசம் மறந்து பணக்கின் வாசம் நுகரும் கல்லாகிப் போன மரமனிதர்களின் மீதும் ; நுனிவிரல் மையிட்ட மக்களின் சத்தியத்தை சாகடிக்கும் சில தலைவர்களின் மீதும் ; கோபம் !

உள்நாட்டில் அறுவடையாகி அயல்நாட்டிற்கு ஏற்றுமதியாகும் சில இளைஞர்களின் மீதும் ; சமூக அவலங்களுக்காக முகநூலில் மட்டும் குரல் கொடுக்கும் பல இளம் தலைமுறையின் மீதும் ; கோபம் ! நல்லவளாய், நல்லவள் போல் என்னை வரைந்துவிட்ட என் குணக்கின் மீதும் சிறு கோபம் தான் எனக்கு ! கண்கள் கலங்கி, உரோமங்கள் சிலிர்த்து, கண்ணீர் துளிகள் தோளில் உதிர, அத்தனை கோபத்தையும் சகித்துக் கொண்டு அமைதிகாக்கிறேன், "யாகவாராயினும் நா காக்க" எனும் வள்ளுவன் வாய்மொழி பள்ளி வினாத்தாளோடு பறந்து போகாமலிருக்க....

# பி. சுபஸ்ரீ.,

முனைவர் பட்ட ஆய்வாளர்



B.Jeya Gowri II M.Sc CS

## **MATHS RIDDLES**

 $15873 \times 7 = 111111$   $15873 \times 14 = 222222$   $15873 \times 21 = 333333$   $15873 \times 28 = 444444$   $15873 \times 35 = 555555$   $15873 \times 42 = 6666666$   $15873 \times 49 = 777777$   $15873 \times 56 = 888888$  $15873 \times 63 = 999999$ 

## **DID YOU KNOW?**

1) India has the highest numbers of tigers in the world.

2) A hippo can open its mouth wide enough to fit a four feet tall child.

3) A hippopotamus can run faster than man.

4) The egg of an ostrich is the largest in the world. It weights 1.6 kg.

5) Crocodiles can sometimes climb trees.

## **THE WAY TO SUCCESS!**

The road to success is not straight. There will be red lights called dangers. There will be yellow lights called obstacles. There will be green lights called trails and There will also be speed breakers called failures. But, there will be a driver of our life-car called GOD. We can safely reach the goal of our life.

Lency.J II M.Sc (CS)

# ALU DCS PLUG-JNS

PUBLISHED BY DEPARTMENT OF COMPUTER SCIENCE ALAGAPPA UNIVERSITY KARAIKUDI