CENTRE OF EXCELLENCE IN MOBILITY

(Part of Digital Enterprise CoE including Mobility, Big Data Analytics and Cloud Computing)

Mobility CoE has been established in RMK Group of Institutions to select and train students in the area of Mobile Computing with focus on developing skills in mobile app development in various platforms like Android, iOS and Web.

SPoC and Core Team member

1. Dr.K.K.SivagnanaPrabhu, Head -Training & Corporate Affairs
2. Prof.M. Somasundaram, Professor (CSE / RMK Engineering College) (SPoC)

Coordinator for RMK Engineering College

Ms.S.D.LalithaAssistant Professor/IT

Advisory Committee

1. Dr.K.A.MohamedJunaid, Principal
2. Dr.T.Sethukarasi, HoD / CSE
3. Dr.K.Vijaya, HoD / IT

Coordinators for Departments of RMK Engineering College

1. Ms. S.D. Lalitha (IT)
2. Ms. L. Raji (CSE)
3. Prof.M. Somasundaram (ECE)
4. Ms. M. Vimala (EEE)
5. Mr.J.Bharath Singh (EIE)
6. Mr.K.Muralidharan (Mechanical)

Student Activities

1. Selection of Students : Selection based on Selection test (open for all branches of engineering) on Programming skills and Aptitude Test
2. Institution sponsored Training to CoEStudents : Advanced Programming Training (CodeMitra), Mobile App Development (iOS and Android)
3. Self Learning through e-Learning platforms : Coursera, Udemy, NPTEL, Spoken Tutorials (IIT Bombay), IMAD (Introduction to Mobile Application Development by IIT Madras)

4. Development of Mobile Apps and uploading in RMK Store ,Google Play Store and App Store
5. Demonstration of Student Projects to industry experts for their reviews through Project Expo Events, Experts Visit to RMK CoE Lab
6. Programming Contests through HackerRankplatform : Top Coders of the Week honored in the College Website
7. Learning by Gamification : Participation in Corporate Contests : Regular and successful performance in
   - TCS CodeVita
   - Infosys Hackathon
   - Smart India Hackathon
   - ICTACT
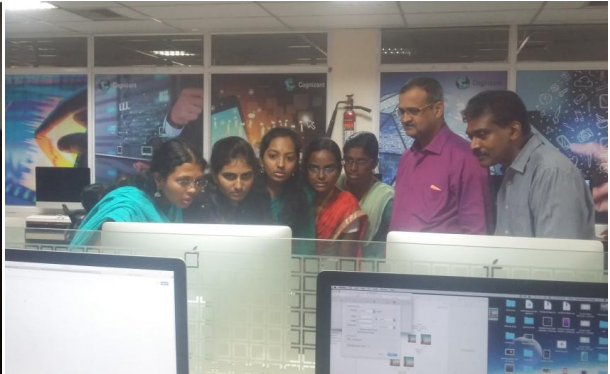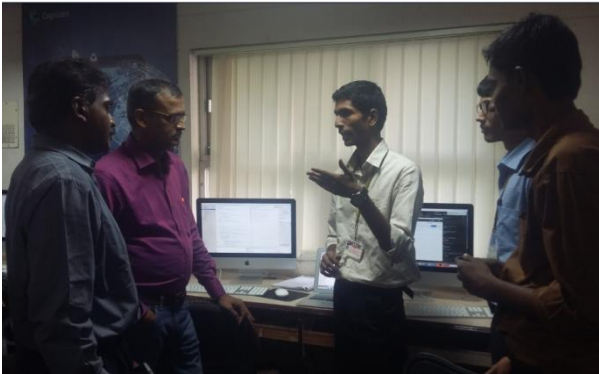   - eGovernance Contest by Tamilnadu Government
   - NASSCOM

Special Guest Lectures by industry experts to CoE Students

1. Technology Trends in Mobility and Cloud Computing by Cognizant Technology Solutions
2. Mobile Application Architecture and Tools by Market SimplifiedPvt Ltd
3. Responsive Web Design and Enterprise Mobile Applications by Infosys
4. Apple technology products demonstration by Apple Business Development
5. Social Mobility Analytics Cloud (SMAC) : Next Generation by Cognizant Technology Solutions
6. Machine Learning by Tata Consultancy Services (TCS)

Core Team and Faculty Coordinator Activities

1. Co-ordination with Advisory Committee Companies
   - Organizing Advisory Committee Meetings at RMK Engineering College
   - Discussion with the experts in planning the curriculum for student training
   - Industry Visit of Core Team Members to discuss with the respective Business Unit (BU) Groups of Advisory Committee Companies : Market Simplified, IBM Bangalore, Virtusa Polaris, iNautix, National Informatics Centre (NIC),
   - Visit of experts from Advisory Committee Companies to RMK Engineering College :CoE review meetings and Student Project reviews : IBM, Cognizant
2. Setting questions and problem sets and administration of Programming Contests in HackerRank platform
3. Support to Placement Group on Training of students for BU Hiring, BU based Internships
4. Regular communication to CoE students through Google Groups : Technology updates, Information about CoE activities etc.
5. Self learning and certifications in iOS Mobile App Development through Coursera and Udemy
6. Participation in CoE related conferences and events : NASSCOM Product Conclave

Project Expo and Reviews

Corporate Contests

Hon'ble Chief Minister's Award for Excellence in e-Governance for Students for the year 2015 – 16

eWIT(Empowering Women in IT) Mobile App competition , September 2015

CoE Students shortlisted for Student App Contests in Global Mobile App Summit and Awards 2015 (GMASA) in May 2015

Infosys Hackathon (12 hours) at Infosys, Mahindra World City, September 2016

Press Coverage about CoE Student Project in DT Next (Daily newspaper) : August 23, 2016

City students to make driving safer with smart technology

A group of students from RMK Engineering College have employed technologies such as the Internet of Things (IoT), cloud computing and big data analytics to understand driving pattern on roads and provide for safer and secure transportation

■ N ARUN KUMAR

CHENNAI: Three final year Electronics and Communication engineering students of RMK Engineering College, Chennai, have developed a digital enterprise application for a smart and secure transportation system

Designed to make driving safe and secure, the digital kit is connected to the on-board diagnostics (OBD) unit in the car, which then transmits the driving pattern of the driver to the cloud server, which can be accessed through a mobile application.

Vinith Kannan, L Vishal and S Saran spent about a year to develop the system, completing it in February this year. Vinith said that they integrated various technologies of mobile computing, the Internet of Things (IoT), cloud computing, big data analytics, machine learning and multiple sensor fusion, to do the job.

"The digital card in our kit will fetch data, like speed from the car's OBD unit, and transmit it to the cloud server on a regular basis, where it will be stored and from where it can be accessed by the driver and owner of the car. If any vehicle is being driv-

en rashly, drivers in its vicinity can also be alerted as a precautionary measure and asked to drive carefully, keeping in mind that they have a dangerous driver in their midst, which incorporates the concept of 'Connected Cars'," he said.

Vishal pointed out that their sys-

tem did not need any extra sensor, apart from the one available in the car's OBD unit, to obtain data from the vehicle.

"We have developed our own algorithm for the system, which is another unique feature of it. Insurance companies can use the data from

our system to get information on the driving behaviour of the person in the case of an accident. Our system can also be deployed in school and college vehicles, government buses, private cabs, driving school vehicles, besides Regional Transport Offices (RTOs), to analyse the driver's driving pattern," he said.

Saran pointed out that they had developed the mobile application for various platforms, including Android and iOS.

"Each driver and owner will have their own unique user name and password with which they can check the data. Our system can be incorporated as part of the Union government's smart city initiative," he added.

The RMK Group, with its three engineering colleges, established the Digital Enterprise Centre of Excellence (COE) where their students can develop apps and upload them on the Google Play Store and App Store. The RMK Group has established iOS Labs for mobile app development and Big Data Analytics labs in all three colleges for developing digital enterprise apps and providing facilities for students to get hands-on training and a place to develop their project.

Vinith Kannan, L Vishal and S Saran with their digital smart kit

No. of Students Selected and Participated in the CoE

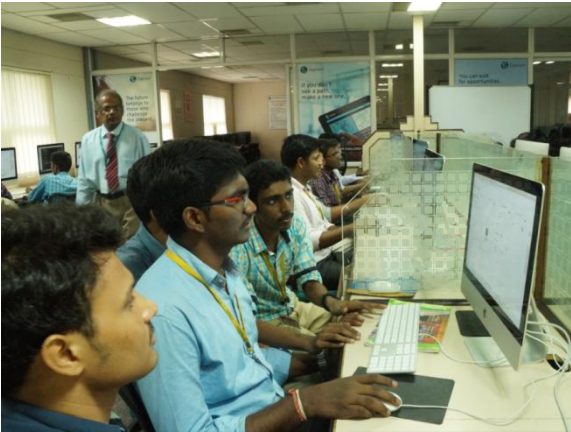| No	Batch of Students	No. of Students in the RMK Group	No. of Students in RMK Engineering College
1	2011 – 2015	90	36
2	2012 – 2016	226	75
3	2013 – 2017	244	98
4	2014 – 2018	125	51
5	2015 – 2019	135	69

Advisory Committee Member Companies :

Cognizant iOS Lab Inauguration

Launching of the Cognizant iOS Lab of Digital Enterprise Centre of Excellence at RMK Group of Institutions ,July 2, 2016 : From left to right: Dr. Elwin Chandra Monie, Principal, R.M.K. Engineering College, Dr.M.S.Palanichamy, Advisor, RMK Group of Institutions,Dr.K.Sivaram, Principal, R.M.D. Engineering College, Mr. RavikumarMaradugula, Associate Director, Global Technology Office, CTS, Shri. R.M.Kishore, Vice Chairman RMK Group of Institutions, Dr.K.K.SivagnanaPrabhu, Head, Training and Corporate Affairs, RMK Group ofInstitutions,

Cognizant iOS Lab : Student projects in the Lab

CODERS OF TOP THE WEEK (SAMPLES)
PROGRAMMING CONTEST RESULTS

CONTEST 1 (14.02.2017 to 21.02.2017)

POSITION	REG. NO.	NAME OF THE STUDENT	BRANCH
FIRST	111714205025	KAVERI JEEVANANTHAM	IT
SECOND	111714205028	LOGESH RAJAGOPAL	IT
THIRD	111714104019	ELANGO	CSE

CONTEST 2 (14.02.2017 to 21.02.2017)

POSITION	REG. NO.	NAME OF THE STUDENT	BRANCH
FIRST	111714205028	LOGESH RAJAGOPAL	IT
SECOND	111714205012	CHRISTOPHER DANIEL	IT

POSITION	REG. NO.	NAME OF THE STUDENT	BRANCH
THIRD	111714104004	AJITH PANNEERSELVAM	CSE

CONTEST 3(14.02.2017 to 21.02.2017)

POSITION	REG. NO.	NAME OF THE STUDENT	BRANCH
FIRST	111714205028	LOGESH RAJAGOPAL	IT
FIRST	111714104004	AJITH PANNEERSELVAM	CSE
FIRST	111714104001	ABDUL WAHID	CSE

CONTEST 4(22.02.2017 to 26.02.2017)

POSITION	REG. NO.	NAME OF THE STUDENT	BRANCH
FIRST	111714104004	AJITH PANNEERSELVAM	CSE
SECOND	111714106123	PRABHU SIVAKUMAR	ECE
SECOND	111714205012	CHRISTOPHER DANIEL	IT

CONGRATULATIONS TO THE WINNERS!

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