



# DR.N.G.P ARTS AND SCIENCE COLLEGE

COIMBATORE - 641 048

## DEPARTMENT OF COMPUTER APPLICATIONS

### News Letter 2014- 2015

#### EDITORIAL BOARD

##### PATRONS

Dr. Nalla G. Palaniswami  
*Chairman*

Dr. Thavamani D. Palaniswami  
*Managing Trustee & Secretary*

##### ADVISOR

DR. P.R. Muthuswamy  
*Principal*

DR. K. Durairaj  
*Vice Principal*

##### CHIEF EDITOR

Mrs.R. Kousalya.  
Head,  
Dept of Computer Applications

##### EDITORS

Mrs.V.Sridevi  
Assistant Professor(SG),  
Mr. S.Poorana Senthilkumar  
Assistant Professor,  
Department of Computer  
Applications

##### MEMBERS

Mr. U. ManuPrasad III BCA A  
Ms. G. Ranjitha III BCA A  
Ms. P. Vanitha III BCA A  
Ms.G. Vishali III BCA B  
Ms. B. Dushnthani III BCA B  
Mr. Bibin M Biju III BCA B

#### ABOUT THE DEPARTMENT

The Department of Computer Applications was established during the year 2007-2008 after the bifurcation of Computer Science.

The Department comprises 12 faculty members (with 09 female and 03 male) who are dedicated and sincere. 11 faculties completed M.Phil degree and 6 faculty members are pursuing Ph.D Programme. The department consists of 339 students at UG level. The students are motivated to handle seminars and to participate in group discussions. Apart from good academic performance, the department encourages participation in the co-curricular and extra-curricular activities to bring out the talents in students. As the course is in high demand there are two sections with full intake of 60 in each section.





### Guest Lectures

- Guest Lecture on “IT Careers & Lives” by Mr. Aravindhan, Head, Operations from Agam Technologies, Coimbatore held on 21st June 2014.
- Guest Lecture on “Multimedia and Its Scope” by Ms. Mythili, Centre Head and Mr. Sathish, Production Artist from Apex Multimedia, Coimbatore held on 26th June 2014.
- Guest Lecture on “Project Guidelines” by Mr. K.Periyasamy, Application Developer from CSC Computers, Coimbatore held on 22nd July 2014.
- Guest Lecture on “Ambition is Real Success” by Mr. Samuel Churchill, Founder and Director, GetSetGo Training Service Solutions, Coimbatore held on 27th August 2014.
- Guest Lecture on “Tour on Mobile Agent “ by Dr.N.Sudha Bhuvaneshwari., MCA.,M.Phil.,Ph.D, Associate Professor, G.R. Damodaran College of Science, Coimbatore Department of Computer Science held on 22 Jan 2015.

### Inter-Departmental Meet

One day Inter Departmental Meet “Tech-knowledge 2014” held on 9th September 2014. Technical Events Paper Presentation, Code Generation, Web Designing, Short Film and Type Master were conducted.

### Workshop

- Google Certification Workshop on “Data Analytics and Web Analytics” held on 24th & 25th July 2014 by Kalvi Institute, Coimbatore.
- Workshop on “Photoshop & Flash” by Mr.Vigneshwaran, Senior Faculty 2D & 3D Animation from Apex Multimedia Solutions, Coimbatore held on 25th July 2014.
- Workshop on “Multimedia” by Mr. Vigneshwaran, Senior Faculty 2D & 3D Animation from Apex Multimedia Solutions, Coimbatore held on 28th August 2014.

### Placement Readiness Programme

- Placement Readiness Programme on “Effective Communication” by Mr. S. Abubacker Siddiq, Assistant Professor, Department of English from Dr. N.G.P. Arts and Science College, Coimbatore held on 21st July 2014.
- Placement Readiness Programme on “Today's Corporate Expectations from the Freshers” by Mr. K. Lakshmi Narayan, Director - Training and Placement from Dr. N.G.P. Educational Institutions, Coimbatore. held on 19th August 2014.

## Technical Symposium

One day National Level Technical Symposium “Techvizha' 15” was conducted on 28th February 2015. The chief guest was Mr.S.Kandasamy Software Engineer, Polaris Financial Technologies Pvt Ltd - Technical Events Paper Presentation, Code Generation, Web Designing, photography, Adzap and Connexions were conducted.

## Extension Activity

- Extension Activity on “How to use Computer and Internet Applications” for students of Govt. Higher Secondary School, Chinnampalayam held on 28th August 2014.
- Extension Activity on “An Enrichment Technologies in Computer Skills” for self group member of Thendral Chikkana Nanya Sangam, Veriyampalayam Coimbatore on 31st Jan 2015

## Online Training Programme

- Training Programme through ICT on Online Aptitude Test using Moodle on 24-7-2014
- Training Programme through ICT on Key Board Skill Test using TYPE MASTER on 18-08-2014
- Training Programme through ICT on Online Aptitude Test using Moodle on 21-08-2014
- Training Programme through ICT on Key board skill test using TYPE MASTER on 27-08-2014
- Training Programme through ICT on Online Aptitude Test using Moodle on 22-09-2014
- Training Programme through ICT on Key board skill test using TYPE MASTER on 23-09-2014
- Training Programme through ICT on Key board skill test using TYPE MASTER on 25-09-2014
- Training Programme through ICT on Online training through IIT Bombay on 29-09-2014
- Training Programme through ICT on Online training through IIT Bombay on 30-09-2014
- Training Programme through ICT on Online Aptitude Test using Moodle on 30-09-2014



## Linkages with Professional body

- The Department has linkage with Professional body “**Computer Society of India**” and has student Branch “**DR N.G.P CSI Student Chapter**” for the betterment of the students through number of student development programmes.



### Pass percentage

- Final year BCA students have secured 94 % (out gone) and achieved **University 7th rank** by B.DUSHNTHANI for April 2014 examinations.

### Proficiency

- P.C Divya Priya of I BCAA has secured 90%.
- S. Mahendran of II BCAA has secured 84%
- R. Saranya III BCAA has secured 88%

### Sports Achievements

- N.Sowmiya of III BCAA Secured second prize in international open chess tournament held at Chennai on 15th august 2014
- N.Sowmiya of III BCAA Secured first prize in KCF open FIDE chess tournament held at Chennai on Dec 2014
- N.Sowmiya of III BCAA Selected for India Rolling Trophy to held at Haridwar
- V. Manoj of III BCAB selected for state level JUDO Association
- M.Senthilkumaran of Selected for state level Kabadi tournament , winner in district level Chief Minster Trophy and first place in Bharathiar University inter college tournament

### Placement Achievements

- 88 students of our department have been offered in various MNC'S such as TechMahindra - 10, Wipro - 25, Infosys - 12, TCS - 9, CTS - 4 , HP - 5, DICOM -11, IBM - 1, VDART - 1, SUTHERLAND - 1, Reliance - 8 and EUREKA FORBES - 1

### Achievements by the Student in Inter college competitions

- More than 50 students from BCA eagerly participated in various competitions like paper presentation, debugging, quiz, marketing etc which was conducted by various by other colleges.

### Achievements by staff

#### Publications by Faculty

1. Mrs. R. Kousalya published an article "Personalizing User Directories through navigation behaviour of Interesting Groups and Achieving Mining Task "in Journal of Theoretical and Applied Information Technology with ISSN 1992-8645 - Vol 67, No 2. Sep 2014 with H-Index 7
2. Mrs. R. Kousalya published an article "Web Mining Through Semantic Similarity Measures Between Words Using Page Counts" in International Journal of Advanced Research in Computer Science and Software Engineering with ISSN 2277128X- Vol 4, issue 9 - Sep 2014 Impact Factor 2.08
3. Mrs. R. Kousalya published an article " An Enhanced path sequence algorithm for personalized web directories" Inventi Rapid- October 2014
4. Mrs. A. Nirmala published an article "Proper Relay Reduction and Route Breakage Prediction in Bluetooth Scatternet Scheduling" in International Journal of Engineering and Computer Science, Volume 3, Issue 12, December 2014 Edition [ISSN 2319-7242]

5. Mrs. A. Nirmala published an article "A Survey On Bluetooth Scatternet Scheduling Research Trends" in International Journal of Computer Science and Mobile Computing Volume 3, Issue 12, December 2014 Edition ISSN 2320-088X
6. Mrs. A. Nirmala published an article "Recognizing pre and post surgery faces using multiobjective evolutionary firefly algorithm" in International Journal of Bio-Medical Informatics and e-Health Volume 2, Issue 6, November 2014 Edition ISSN -2321-9017
7. Mrs. A. Nirmala published an article "Segmentation of Medical Images Using Image Registration" in IJCSMC - Sep 2014 with ISSN 2320-088X ,Impact Factor 2.8
8. Mrs. C.Kumuthini published an article "Qos factors based node selection and scheduling algorithm for Improving System performance in mobile adhoc networks" published in IJCTA volume 5 ,Issue 6,December 2014 ISSN:2229-6093 Impact factor 1.5
9. Mrs. C.Kumuthini published an article "A Survey of various reputable unicasting protocol and new energy EEDANT in MANET" IJCTA Volume 5, Issue 3, June 2014 ISSN:2229-6093 Impact factor 1.5
- 10.Mrs. V. Sridevi published an article "Segmentation of Medical Images using Image Registration" in International Journal of Computer Science and Mobile Computing ISSN 2320-088X ,Impact Factor 2.8
- 11.Mrs. V. Sridevi published an article "work Fiction On Fuzzy Based Cancer Gene Identification Through Clustering" in International Journal of computer science and communication network Volume 4 , Issue 6 , December 2014 Edition ISSN NO.2249-5789
- 12.Mrs. V. Sridevi published an article "Cancer Gene Identification Through Clustering" in International Journal of innovative research and development Volume 3 , Issue 12 December 2014 Edition [ISSN NO.2278 – 0211]
- 13.Mr. R. Rajeshkanna published an article on " Energy Efficient Load Balancing Algorithm in MANET" - Inventi Journal July - Sep Edition.
- 14.Mr.R.Rajeshkanna published an article on " Adaptive Multicast Multimedia Transmission Routing Protocol System(ACMMR) for Congestion Control and Load Balancing Techniques in Mobile adhoc Networks" – International Journal of Applied Engineering Research-November 2014.
- 15.Mr.R.Rajeshkanna published an article on "Adaptive Joint Energy Efficient Multipath Routing Algorithm for Node Management Techniques in MANET" -Inventi Rapid:Wireless Communication & Networking – January 2015.
- 16.Mr.R.Rajeshkanna published an article on "An Adaptive AODV Routing Protocol for Load balancing and Delay Recovery in Mobile Adhoc Networks" – IJARCSSE – October 2014.
- 17.S.Poorana senthilkumar published an article on " Issues of Various Attacks in Mobile AD-Hoc Networks" –ISBN : 9380 - 65730 - Feb 2015

## Book Published

- Mr. R. Rajeshkanna has published a book titled “Recent Trends in Enterprise Information Technology” (ISBN 978890773072)

**Total Paper presentations: 74**  
**Total Journal Publications : 68**  
**Book Published : 1**

## Participation by Faculty

1. Mr. R. Rajesh Kanna Participated in 5 days workshop in” PHP and MYSQL “ conducted by ICTACT, Tamilnadu at Dr. Ranganathan Engineering College, Narasipuram, Coimbatore.
2. Mr. R. Rajesh Kanna Participated Hands on training on “NS2” at Kongu Engineering College, Perundurai on 17.07.2014 to 19.07.2014
3. Mrs.C.Kumuthini Participated National level workshop on “Simulation and Emulation of Self Organized Networks” at Kongu Engineering College ,Perundurai on 11.09.2014 , 13.09.2014
4. Mrs.C.Kumuthini and Mrs K.Gomathy participated in One day workshop on” Big Data Analytics using WEKA” at Karpagam Arts and science College, Coimbatore on 03.03.2015.
5. Ms. K. Suguna and Mrs. B. Ramya participated in two days national level workshop on “Data Mining Tools (WEKA, RAPIDMINER) “ at Dr. N.G.P. Institute of Technology held on 29th & 30th December, 2014.

### Inter Departmental Meet “Tech-knowledge 2014



Inaugurated by Dr.K.Duraiaraj Vice Principal Dr.N.G.P. Arts and Science College Coimbatore on 9th September 2014.

### Guest Lecture



“Tour on Mobile Agent“ by Dr.N.Sudha Bhuvanewari., MCA.,M.Phil.,Ph.D, Associate Professor, G.R. Damodaran College of Science, Coimbatore Department of Computer Science on 22 Jan 2015.



“Ambition is Real Success” by Mr. Samuel Churchill, Founder and Director , GetSetGo Training Service Solutions, Coimbatore on 27th August 2014.

## Placement Readiness Programme



“Effective Communication” by Mr. S. Abubacker Siddiq, Assistant Professor, Department of English, Dr. N.G.P. Arts and Science College, Coimbatore held on 21st July 2014



“Today's Corporate Expectations from the Freshers” held on 19th August 2014 by Mr. K. Lakshmi Narayan, Director - Training and Placement , Dr.N.G.P.Educational Institutions, Coimbatore.

## Extension Activity



How to use Computer and Internet Applications” for students of Govt. Higher Secondary School, Chinnampalayam held on 28th August 2014.



An Enrichment Technologies in Computer Skills” for self group member of Thendral Chikkana Nanya Sangam, Veriyampalayam Coimbatore on 31st Jan 2015

## Workshop



Google Certification “Data Analytics and Web Analytics” by Kalvi Institute, Coimbatore on 24th & 25th July 2014.

## National Level Technical Symposium



National Level Technical Symposium “Techvizha' 15” on 28th February 2015 by the chief guest Mr.S.Kandasamy, Software Engineer Polaris Financial Technologies Pvt ltd



## THE ROLE OF SOCIAL MEDIA IN AGRICULTURE - AGROPEDIA

### INTRODUCTION

- Agriculture is important to India's economy. The need for current and relevant information by professionals in this sector for sustainable agricultural production is a key issue for the nation. Information communication technology facilities are greatly influencing how information is sourced and disseminated these days, and the latest trend is to use social networking sites.
- Traditionally, agricultural information exchange has been dominated by industrial media such as newspapers, television, and magazines. In recent years, however, technology awareness and computer literacy are increasing across all demographics and various forms of social media are being used more and more by people looking for news, education, and other information related to agriculture.
- Social media can be defined as an internet-based application that allows the creation and exchange of user-generated content. It is the blending of technology and social interaction that creates value in these types of media.

## THE ROLE OF SOCIAL MEDIA IN AGRICULTURE - AGROPEDIA

### Why Social Media

- Is social media important to agriculture? While many outsiders would never think to associate farmers, dairy farmers, and animal keepers with Facebook and Twitter, they actually represent a large group of active users on both of these social networking sites. According to some farmers and tech-savvy scientists, social media is an indispensable communication tool for farmers to connect with each other and educate others about their industry.
- A recent article showcased a farmer from a foreign country who uses social media to educate dietitians, politicians, and consumers about farming. They also connect with farmers around the world running many different types of farms. We personally believe that more success and encouragement for younger farmers to jump on board with social media. While some farmers are resistant to social media, many are beginning to see the benefits of building relationships with other farmers and leaders in other industries and the scientific community and continue to press the issue because, in his opinion, social media is another tool that can help farmers maximize output and profits.
- Agriculture is becoming more diverse as a population and we are becoming further removed from the farm, it is important that agriculture explore different communication options. New generations removed from the farm, meaning it has been two generations or more since they have lived on a farm or other agriculture-related industry.

### Agropedia

- Agropedia is an open-ended knowledge sharing platform. It is an online agricultural knowledge repository that makes agriculture information available to scientists, researchers, extension personnel, and the agricultural community and allows them to search and make contributions to the vast knowledge base. It is a collaborative project of seven consortium partners: viz. ICRISAT-Hyderabad, NAARM-Hyderabad, IIT-Kanpur, IIT Bombay, GBPUAT-Patna, UAS-Raichur, and IIITM-Kerala. The project is backed by the government of India and sponsored by the World Bank through the National Agricultural Innovation Project, which was launched on 12 January 2009. Many social enterprises are currently addressing the agriculture space, attempting to bring new technologies to rural areas to improve the efficiency and profitability of farmers.
- Agropedia works as a one-stop hub for information on the agriculture ecosystem. The Wiki-style platform



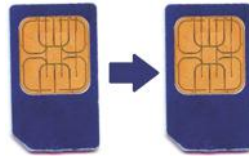
provides, among other things, a space for stakeholder interaction, best practice sharing, news updates, and an online library certified by the Indian Council of Agricultural Research (ICAR). Agropedia has also collaborated Krishi Vigyan Kendra, a training and education center for farmer and rural entrepreneur's, to develop "Voice Krishi Vigyan Kendra" (VKVK), a mobile-based advisory system that send SMS and voice-based messages to field officers and farmers around the country.

S.ARUNKUMAR  
III BCA A

## 2. MOBILE PHONE CLONING

### What is cloning???

Cell phone cloning is a technique is transferred into another phone. The replica of the original cell phone like a from and received by both phones, only service provider network does not have a phone and the "cloned" phone. The cloner



wherein secured data from one cell phone other cell phone becomes the exact clone. As a result, while calls can be made the legitimate subscriber is billed as the way to differentiate between the legitimate can set the options to ring his phone when

you make a call and you will have no idea that the cloner is listening from his own mobile. He can read text message, phone book entries, look at pictures etc. Also he can dial phone numbers from their phone and a whole lot more. Though communication channels are equipped with security algorithms, yet cloners get away with the help of loop holes in systems. So when one gets huge bills, the chances are that the phone is being cloned. Millions of cell phones users, be it GSM or CDMA, run at risk of having their phones cloned.

RENUKA.S  
MANJULA.N  
I BCA - B

## 3. ORGAN CHIP

Many viruses which go on to infect individual organs to various degrees, hang out in white blood cell reservoirs where they can co (Whole organs on a chip coming to diagnostic centers near you)

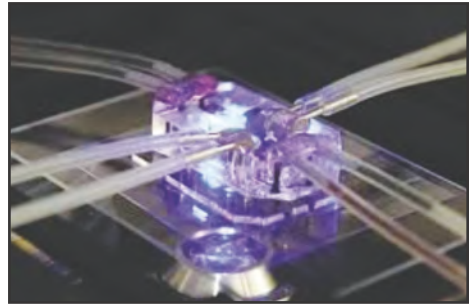
The organs-on-a-chip has become an important way to test the effects of chemicals or radiation on different kinds of cells. The military, in particular, has been interested to use them to study how poisonous agents like ricin, botulinum toxin, or anthrax attack different organs. Ideally, there would be a way to integrate individual subunits into a single body-on-a-chip where all the different elements could interact in a more realistic way. Researchers in the field (and the various funding bodies that support them), got together a meeting of the American Society for Microbiology in DC to discuss how this might best be done. Several concepts have previously been fleshed out for devices that mimic the biological particulars of everything from liver or lung, to more refined tissues like the brain. The key now is to integrate some of the other intangibles that make the body work as a whole the more nebulously distributed organs like the vasculature, skeleton, or skin.

Donald Ingber, an FDA-supported researcher from Harvard's Wyss Institute, has developed a "bone marrow on a chip" device. Bone marrow, among other things, is where blood cells get made. The effects of radiation, and many toxic chemicals, are most acutely absorbed there. These kinds of nasties often lead to the "liquid tumor" class of cancers — the leukemia's and lymphomas where out of control cells proliferate and then circulate as single entities in the blood or lymph ntinually gain infective passage to the entire body.

An article mentioned that the EPA is planning to announce a new \$18 million war chest to combine livers on chips with other devices that simulate fetal membranes, mammary glands, and developing limbs. These regions have been shown to be particularly susceptible to environmental pollutants like dioxin and biphenyl

A. Like many harmful chemicals, their metabolite products generated by the action of various enzymatic systems of the liver are often what do the real damage.

Sometimes the fastest way to find out what chemical, bacteria, virus could be causing your problem is not to try to Positively ID the invader but rather to analyze their metabolic effects on the body. As it happens, different organs have come to exert their wills upon each other in many idiosyncratic ways. Gross physiologic observables like heart rate, blood pressure, and blood composition are in part controlled by rare peptides or hormones often made by just a single organ. In quirky yet predictable feats of evolution, via myriad migrations from salt water to fresh water and back, ultimately through mud to air, our lungs, kidneys and guts have had their mutual allegiances repurposed and honed for the benefit of the whole.



The plan for the integrated organ on a chip is to have working devices in researcher's hands in five years.

On the other diagnostic front, there are new gene or antigen array chips that can potentially sequence or otherwise capture any villain as fast as you can feel it. No doubt both approaches with by of value in keeping our military, and hopefully our civilians healthy.

- V.KANIMOZHI  
C.VIJAY  
III BCA-B

#### 4. EWASTE

E-waste is a popular, informal name for electronic products nearing the end of their "useful life." Computers, televisions, VCRs, stereos, copiers, and fax machines are common electronic products. Many of these products can be reused, refurbished, or recycled.

Electrical waste contains hazardous but also valuable and scarce materials. Up to 60 elements can be found in complex electronics. In the United States, an estimated 70% of heavy metals in landfills comes from discarded electronics.

#### RECYCLING:

Recycling raw materials from end-of-life electronics is the most effective solution to the growing e-waste problem. Most electronic devices contain a variety of materials, including metals that can be recovered for future uses. recycling reduces the amount of greenhouse gas emissions caused by the manufacturing of new products.

The processes of dismantling and disposing of electronic waste in the third world lead to a number of environmental impacts as illustrated in the graphic. Liquid and atmospheric releases end up in bodies of water, groundwater, soil, and air and therefore in land and sea animals – both domesticated and wild, in crops eaten by both animals and human, and in drinking water.

The environmental impact of the processing of different electronic waste components



#### The environmental impact of the processing of different electronic waste components

E-Waste Component	Process Used	Potential Environmental Hazard
Cathode ray tubes (used in TVs, computer monitors, ATM, video cameras, and more)	Breaking and removal of yoke, then dumping	Lead, barium and other heavy metals leaching into the ground water and release of toxic phosphor

Printed circuit board (image behind table - a thin plate on which chips and other electronic components are placed)	De-soldering and removal of computer chips; open burning and acid baths to remove final metals after chips are removed	Air emissions as well as discharge into rivers of glass dust, tin, lead, brominated dioxin, beryllium cadmium, and mercury
Chips and other gold plated components	Chemical stripping using nitric and hydrochloric acid and burning of chips	Hydrocarbons, heavy metals, brominated substances discharged directly into rivers acidifying fish and flora. Tin and lead contamination of surface and groundwater. Air emissions of brominated dioxins, heavy metals and hydrocarbons
Plastics from printers, keyboards, monitors, etc.	Shredding and low temp melting to be reused	Emissions of brominated dioxins, heavy metals and hydrocarbons
Computer wires	Open burning and stripping to remove copper	Hydrocarbon ashes released into air, water and soil.

**MANISH KUMAR.S**  
**RIJATH THOUFIC.S**  
**II BCA B**

## 5. WINDOWS 10

Windows 10 is a New Chapter for Microsoft On Jan 21, Microsoft raised the curtain on the next act for Windows 10 and provided some significant insight into how the operating system and Microsoft are evolving. As a quick recap, Windows 10 is currently going through a year-long “preview” period. This started with the Technical Preview in September 2014, and will end with the release of Windows 10 which we expect to see this coming September or October. In between, Microsoft is continually updating the preview to test and demonstrate new capabilities and aspects of the OS. The announcements this week are aligned with the next major update of the preview: “Technical Preview 2”. This update focuses more on consumer rather than enterprise features which we expect will be expanded in the coming months. The new preview includes the revamped tablet experience, a more complete feature set, and the first look at the upcoming phone UI. While there is still work to be done, Microsoft is demonstrating progress from the original preview. For those who had issues with Windows 8's UX, Windows 10 should be more comfortable to work with. Those who like Windows 8's touch UX will appreciate how the experience has been evolved to better adjust to different types of tablet and 2-in-1 devices. All users will appreciate how the user can control the experience based on their preferences.

Along with the enhancements to the technical preview, Microsoft also made a number of other announcements about Windows and its ecosystem. Now, we see about a major feature in windows 10.

Windows 10 changes applications

With Windows 8 Microsoft introduced “Metro” apps which failed to catch on with developers as Microsoft hoped and remain a weakness of the ecosystem. These apps were like the tablet apps on other platforms in that they were touch oriented, downloaded from an app store, and ran full screen. While there were similarities to apps that existed on Windows Phone they were distinct and came from a separate store, with different terms and conditions and administration options. With Windows 10, Microsoft has melded these into a single “Universal app” model which runs across all Windows devices (phone, tablet, PC, Xbox, and even some new types of devices). Universal apps on Windows 10 have done away with many of the clumsy issues from the Windows 8 days. Most notably when running on a PC they now run in a window alongside all other applications and are virtually indistinguishable from legacy Windows applications. This is important, because it extends the reach of these apps to traditional non-touch PC users. They are easier to install, update, and secure. They are all signed, and run isolated from other apps on your system.

**Saravanan.S**  
**M. Vishnu Manigandan**  
**I BCA 'A'**

## 6. FIVE REASONS WHY ANDROID WEAR HAS NOT BEEN A SUCCESS

When Google announced Android Wear, it was highly expected that Google will be able to replicate Android's mobile success and take it forward with the wearable's. But it seems like the plans have not gone according to their expectations.

Recent report on wearable market via Canalys has deemed Motorola Moto 360 as the best-selling Android Wear (AW) in the market. Which hardly comes as surprise, considering Motorola, Samsung, LG, Sony and Asus are the only brands to announce their respective wearable watch last year?

Overall, wearable business has done well with 4.6 million units sold but the fact that only 720,000 of those were running on AW is a sight of concern for Google and its wearable team. So, when AW has the most competent product in the form of Moto 360, why hasn't the supporting wearable platform been accepted by consumers across the globe? The fact that 4.6 million wearable sold is an exciting reading to gauge but how many of those actually constitute under the smart watch segment? And that is exactly the reason behind AW holding less than one-fifth of total wearable sold last year.

Here are some cases to consider for Android Wear's poor showing:

**Too early into the space**

Last year was seen as the birth of a new form factor and how technology was getting closer to us, day-by-day. Android Wear was supposed to enable wearable to become unified under one platform (like how mobile has become) but that hasn't proven to be the case. Taking Google's heed, Apple smartly decided to weather the initial storm and bring out Apple Watch for the public, after reading the market's traction.

**Wearable's need to evolve**

As you can see with the numbers, fitness band seems to have been the primary benefactors of this segment. The likes of FitBit, Jawbone etc. have rallied as they are more affordable than smartwatch (running AW). Watches right now are, not functionally worthy of its value, or too similar to fitness bands in lot of aspects.

**It's not the hardware but software**

While Android isn't the reason behind many manufacturer's hardware fall but same cannot be said for its wearable cousin. Lot of issues crept up with the first version of AW and similar pattern has been observed with the newer version as well. Google has to find the right formula between software and hardware to get the platform up and running, otherwise Apple might have a bigger say in 2015 with its much delayed Apple Watch (running on iOS). Brands have gotten tired with AW and they've started (or already made) software for wearables on their own.

**Too much happening**

Wearables were introduced purely to ease the use of your phone and offer you convenience of communicating without having to hold your device in your hand. But by adding apps, virtual keyboard, fitness and music among others, Google has somewhat lost the true essence of having a unified wearable platform. AW needs clarity, simplicity and effective functionality, all principles that the search giant preaches wholeheartedly.

**Battery**

Talking about AW doesn't end without referring to its maligned battery life support. Yes, with Lollipop version, things have marginally improved but wearables are meant to last (at least) for couple of days if not more but with AW (as seen on Moto 360), its case of charging once (or twice) in a day. And for its worth, you won't really bother paying anywhere close to Rs 10,000 for such a product, let along Rs 18,000 (price of Moto 360 in India).

In the end all we'd like to say is, 'dear Google we need the AW to become with wearable, just like how Android teams up with mobile seamlessly'. And before Apple manages to steal your thunder, we fully expect you to find the right balance with Android Wear (hopefully at Google I/O 2015).

**MAHENDRAN .S  
KIRAN RAJ .A  
II BCA -A**