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MAGAZINE

Expand your Mind, Change Your World

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University of Boumerdes - IEEE - INELECTRONICS student club

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INTERVIEW

The Inelectronics Magazine team had the honor to interview one of the most remarkable teachers of our department, Mr Hamdi, who sets a model for every student in INELEC.

Interview done by: Tadjer Yasmina
Benantar Fedoua

Hello Mr. Hamdi, we are honored to be here, in your office and would like to thank you for receiving and granting us some of your precious time.

Mr. Hamdi: The pleasure is mine.

- First, we are sure all INELEC Students would be interested to know who Mr. Hamdi is. Could you please tell us more about your professional career?

Mr. Hamdi: Of course, no problem. I was a student at “faculte d’Alger” before being an assistant there and at ENP d’El Harrach. When USTHB opened in 1974, I went there because “faculte d’Alger” was removed. In 1979, I was officially recruited as teacher-engineer at INELEC, and then they sent me for an MSEE and PhD degree. I stopped in 1983 for professional reasons (INELEC needed me for teaching). Later in 1997, I took a 4_year leave to teach in Amsterdam, Netherlands, so I left. I came back to INELEC in 2001 and I was asked to teach math courses Analysis I, II and III.

I also taught many different modules like machinery, power system, probability & statistics, linear systems, control systems...etc, in different countries like France, Netherlands, USA, Algeria and in both languages French and English. I think it is normal for someone who has been teaching in engineering for a long time to teach any of these modules. I believe that all people who choose teaching as a vocation expect a moral satisfaction and recognition. I have been teaching at INELEC for 23 years now and as long as my students want me to stay I will, unless my physical health does not permit it.

- Could you tell us about the ways you have managed your work as a teacher?

Mr. Hamdi: Well, I always try to prepare the courses and write them down before the semester starts. I also put a list of things to do and set a plan for the whole semester, things that should be treated in lectures and recitations. I take time to prepare everything and fortunately there still are some students who try to solve my home works, it encourages me to do more efforts.

- Could you give us a brief a description about the differences between INELEC at that time & DGEE? now?



Mr. Hamdi: There are many differences. At that time, when it was an institute, there was a test for admitting students. They had to take Baccalaureate average + Math + Physics / 3. after those are selected, they had to take a test in Oran, Annaba and Algiers with tight security. we used to take only the first 51 students who succeed the test. We had 12 Students in Labs or recitations; very well followed up. It was a high level school for both teachers and students and students had no PROBLEM FINDING JOBS or TRAININGS.

Now For DGEE, they removed admission test and decided to do Derogation, like 40% of people don't deserve to be here. Too many students in Labs and recitations, so even Text books are not enough.

Teaching becomes even harder. I hope with Mr. Dehmas & Azrar INELEC will come back. They were my students and they have the spirit of old studies, so they will bring back the old rules.

- What is the advice you want to give to INELEC Students to encourage them?

Mr. Hamdi: My advice as a teacher is not to underestimate English teaching of the 1st year simply because the poorer you are in English, the harder to follow in lectures & recitations. Also I advise students to try not to think “Study is just for learning”. It is important to have ambitions to explore and learn. Students should not just come to write on a piece of paper or solve a differential equation and that is all. Besides, I expect my students to do efforts and prepare exercises, be more serious.

- Thank you Mr. Hamdi.

Mr. Hamdi: You are Welcome, my pleasure.

We thank Mr. Hamdi so much for his time and for sharing his wonderful experiences with us. I hope that this interview would serve as an inspiration to every student of INELEC.

Actuality

Women in engineering

The gender relation in general and the division of labor among women and men are in the stake in several countries and also in several sectors of life. Nowadays, because of the women rights to seek equal opportunities in the workplace, more and more young female population in the age range to study in the higher education apply for the professional courses that a few decades ago were for male population only; such as in different engineering courses.



Engineering holds the distinction of being the most male-dominated of all professions. As the number of women is much greater in fields like humanities, followed by the fields of biology, health, linguistics and arts.

The question that would probably be raised in here and that kept aching me is: why is the proportion of women too small in the heart of technology? Isn't it about time that we start getting really involved in this important industry?

As it is usually known, the female students have better academic performance than their male colleagues as in: assiduity, results of evaluations, and participation in the class activities. But most of them are not well adapted to the profession, nor can find the job in the market. That is mostly because the preference for male engineers is around 8 out of 10.

A study was made by two technology institutes in two different countries in terms of modernization and social impact (Germany and Brazil). The study revealed interesting results as to the motivations of female students to elect the engineering field. The majority of women (65%) feel the vocation to the technical profession, only 10.8% of them had decided for a technical profession due to the lack of alternatives.

Almost half of the female students (48.7%) had decided due to expectancy for a good job in the market with the degree, and only 37% were due to expectancy of a good wage.

Now, in exploring the engineering industry: it is clear that being a woman in this field is different from being a man.

Because there are relatively few women around, they find themselves more exposed: their screw-ups being more visible (as they say: "women have not yet achieved the right to be mediocre") but their success also more visible.

Being an engineer is also about being a leader, speaking up your mind and working in team. The fact is, women usually tend to be more sympathetic, therefore expecting more readily sympathy, which is as you may conclude a down point for us in this industry so let's make sure to do our best to change it. Women also tend to be more empathic and more diplomatic, two traits that are highly useful in collaborative work. We also tend to be better networkers because we pay more attention to other people's needs.

All these natural traits in our psychology are great factors for our career in the engineering

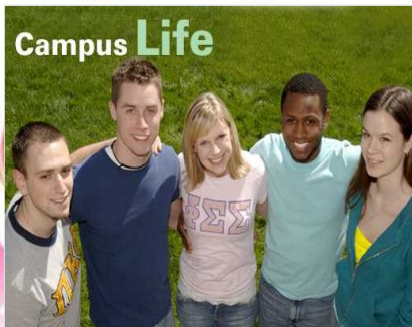
To finish, I only have one last advice for all of us women engineers in Algeria and around the globe: as Martin Luther King Jr said once: "excellence is the best antidote for racism" I think this applies to us in so many levels.

So let's go out there and be Excellent!

Written by: Benantar Fedoua

INFORMATIVE

Diversity activities needed on our campuses



Most campuses in Algeria nowadays are diverse. Is it not obvious that foreign students feel different and suffer discrimination problems? Is it not strange for us to have foreign students about whom culture we know nothing?

It is time for us to start thinking about those students from different cultures. I have been myself in a foreign campus where I could lead a research on how to bring diversity to campus. My research resulted in the conclusion that our campuses should create activities that would have the purpose to get Algerian students and foreign ones to know each other, so they can work together. Well organized activities, such as cultural presentations on different countries, which must be presented by native people of each country. This sort of event would at the same time tell Algerian students about foreign cultures, so they can get to know their fellow students from other countries better. Also, it creates a more comfortable atmosphere to work among students.

Diversity is crucial in a campus. Because the modern world has to be diverse, we must know how to deal with international issues more tolerantly. It is obvious that our campuses need to raise awareness regarding diversity. Therefore, I put the result of my research in use for those interested in a more rewarding campus and a better understood world. Most importantly, Diversity creates a culturally rich campus life for all students.

The following recommendations I came up with as a result of my research:

Recommendations on diversity issues:

- Prepare more activities for international as well as Algerian Cultures.
- Activities should be appealing to most students on campus not only a category.
- Advertise by means that are exposed to students such as (in the classroom, face book quizzes and applications...)
- Give them the time to plan for it.
- Make it mandatory as assignments for some classes.
- Ask students views and how to improve it.
- Create a diversity committee on campus.
- Reward the students that participate, in order to encourage the others to enroll in diversity activities.
- Make it an important part of the student orientation.
- Both students and diversity committee should be aware that it is a challenge; so they have to work together.
- I think, the best campuses are the ones that are the most diverse.
- Multiculturalism and diversity have to be a social need in every campus; in order to promote the concept of Bringing Diversity to campus.

Written by: Belmihoub Ibtissem

INFORMATIVE

The Da Vinci Journal

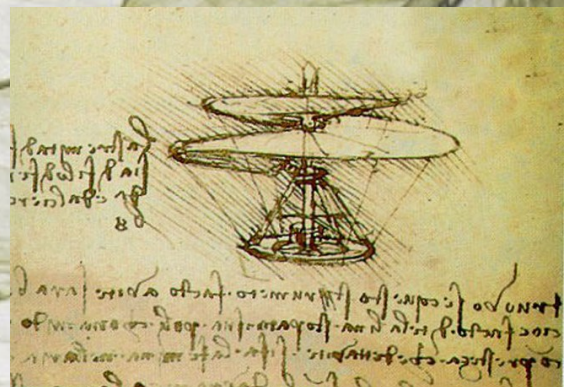


Most people when referring to Leonardo Da Vinci think of him as an artist, may be because of his work *The Mona Lisa*, simply considered as one of the most famous and parodied paintings of all time or they might just be having Dan Brown's book *The Da Vinci Code* in mind. Nevertheless, during his lifetime, and even after his death, he proved through his works, that he is one of the most diversely talented men who ever lived.

Thousands of papers that he used to write almost daily, showing notes, observations, scientific studies, diagrams, plans and a number of inventions gave an insight to his contributions to different fields of science. But, perhaps most of his work and interest were devoted to engineering. Throughout his life, he realized projects, and conceptualized others that were hard to accomplish because of their complexity, or even impossible.

Acting as a military engineer, he designed a number of combat devices such as arsenals, submarines, and tanks. During the Second Italian War, he produced maps to be used while they were very rare, and devised a system of moveable barricades to protect Venice from attack. He even went away ahead of his time, by designing flying machines. He is known to be the first engineer ever that designed a helicopter! Besides, he set plans for parachutes and flapping wing machines. Although these designs were impractical during his time, they inspired engineers later.

The list of his inventions, designs and conceptions is too long, and yet, too diverse and visionary. The Da Vinci journal contains concepts of a calculator, and even a concentrated solar power system. Some of his designs are in the other hand, too weird; examples are a double-hulled unsinkable ship, and even snowshoes to walk on water! Although they can be as weird as the fact that his journal is written from right to left in a mirror image fashion, Leonardo's designs still an extremely precious human heritage underlying a very rare sense of creativity, and an unusual ability to link art to science. Surely, combined with his works and spirit, they made him an "Ideal Engineer".

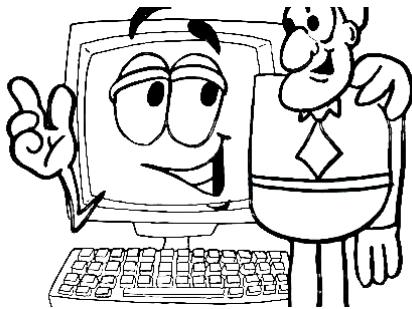


Written by: Djedidi Mouad

TECHNOLOGY

Computers to read your body language

The keyboard and the mouse are no longer the only means of communicating with computers. People prefer devices that respond to the touch of a finger or the spoken word, but can we go further still? Can a computer understand our gestures and even to read facial expressions?



A team of researchers set out to do that. They would like to have a form of ambient intelligence where computers are completely hidden extracting information useful for the user. First, the video stream must be analyzed in real time to extract a hierarchy of three levels of features. At its lowest, it's a mathematical description of shapes, movements and flows. At the next level, this basic description is interpreted in terms of crowd density, speed and direction. At the highest level, the computer is able to decide when the activity becomes abnormal. A second application would be in marketing especially to monitor how customers behave in shops. The third one is a technology of increasing interest where viewers can select what they want to visualize using webcams to see which part of the screen they're looking at.

But, did they take account of whether the applications would be ethical and legal about reading people's behavior?

Written by: A. Sara Keltoum

IPad... Another step into the future



“When something exceeds your ability to understand how it works, it sort of becomes magical”. It’s how Jonathan Ive, senior designer in Apple Inc describes the company’s new generation product. A tablet computer providing the best way to experience the web, access to emails, listen to music, watch videos, view photos, read books, play games, find locations, write notes... and over 300 000 other applications, with a high service quality, and an extraordinary level of performance. Yet, all that, in a very thin and light device, no more than 1.3 cm thickness, and 730 g weight! The company designed the Ipad such that its dimensions make it desirable for all the tasks it performs, so simple, that its interface is practically characterized only by a multi-touch screen, and especially, so easy to handle. There is no wrong way to hold the device, the Ipad automatically flips its content to the correct orientation, “I don’t have to change my self to fit the product, it fits me” pursue the designer.

Besides the portrait mode, the Ipad is full of surprises, from the capacity of its battery to provide 10 hours of video, and up to 140 hours of audio, to its price, starting from only 499\$. The philosophy of Apple company towards making technology accessible to all, so simple such that people can easily deal with, is really changing the world today.

Written by: Djedidi Mouad

SOCIAL

Our role as students in removing drugs from our society

Social problems keep appearing and sometimes the same ones we have to face all the time. For example Drugs. The Algerian society is in danger with the increasing number of people that use, sell or die from drugs. Some think it has been always there like a tradition now. They say it is a virus without remedy, and that we can do nothing about it. It is not true, it can be changed. It can be decreased and if we persist, it may even disappear.

Besides various members of society, students should get involved in raising awareness among our society because they are an important social class. As students, we should get involved in various organizations, conferences and activities that fight drugs. We should give examples of life before and after of a drug addict. We can, for instance, show symptoms of those who start using them for the first time so as people see the bad effects. In addition, we can advertise the dangers of all kinds of drugs so that people know their degrees and effects. Furthermore, we can make people aware that it is not just the other that may be victim; they might themselves or a relative become a victim.



Students as the future intellectuals of Algeria should put an effort into increasing awareness about drugs. Students must use new technologies such as the social media (e.g. facebook), direct and indirect messages to fight this evil. It is not impossible when we all work together for one common goal.

Written by: Belmihoub Ibtissem

Algeria's illegal immigration "Harga"

Our Country is facing many social problems that unfortunately keep increasing all the time and put our society in danger. These sensitive issues touch one of the most important and big categories in society which is the youth.



In recent years, a new and dangerous phenomenon of illegal immigration known as « HARGA » has tremendously grown up in Algeria. HARGA is the illegal crossing of Algeria's western coasts to reach Spain, or eastern coasts to reach Italy by « death boats » full of Algeria's young people aged between 18 and 40 who risk their lives to reach the Europe seen as heaven and the land where all dreams of success come true and a better life is possible.

Unemployment, school dropout, evil spirits, corruption, bureaucracy, violence, poverty, lack of freedom and repression in all forms are the reasons that push Algerian young people to try to reach Europe despite all the risks that exist.

To stop this phenomenon or at least reduce its occurrence, urgent measures should be taken by the government which is actually the first to react, starting by improving the standards of living through the offer of better job opportunities and grants for small projects to young jobless people, as well as, set up a political stability and democratic institutions to spread equity, moreover, encourage civil society groups and freedom of associations so that young people will be involved in diverse cultural and social activities.

As students, we should contribute to the fighting of this evil, by being a part of associations and conferences that talk and try to face this social problem. Moreover, We can use the media with all its forms, for example, by publishing articles in newspapers and magazines, making videos and posters that increase the awareness about Harga and show its risks, effects and consequences.

In the end, We all; as Algerian citizens should step up and show great importance to our country and always think about the disappearance of Harga.

Written by: Maamri Samir

Express Yourself

The voice of the truth

I find myself walking in the dark, “where is the light? Is it the middle of the night?” I said. I look up to the sky, there are no stars, it feels like I am in an empty box without the presence of any prove of life; no sounds, no light, no objects, there is nothing, “where am I? Am I dreaming?”

Suddenly I heard a pretty voice, it is like no other voice: “Brahim, are you afraid? You should not be, because I will show you the truth that you and others won’t see and believe, a truth that you should be afraid of.” I stopped her and asked, “what truth are you speaking of? but...first who are you?” She did not answer me but she moved away saying, “follow me if you want to know the truth, after that you will figure out what I mean by yourself”. I did not have any other choice; I followed her voice to a door, a door made of light. After passing it, I said: “what is this?” So many young people yelling, taking drugs, drinking alcohol, gambling, doing nothing that has a value to me. Suddenly, the images changed, in which I saw, another group of young people working together, helping each other, building up their country, making careers for themselves without hurting others.

All images stopped and disappeared, the beautiful voice returned to me in the dark saying: “did you understand? Did you get it?” A strong sound woke me up, it is the sound of my mobile phone, it is another day in Boumerdes, another day at ex-INELEC. At that time I did not get what she meant. I got it when my teacher said in his class: “what if we reverse the direction? What are you saying?”

Now, I got it, I said to myself, “what will happen if I start from the end to the beginning of my dream” I got it now. Did you?

If we follow the first group I saw in my dream, we are going to the darkness, we have no future. If as students we stay as we are today, we won’t make the best of us. We have to unify and listen to the voice...the one that I heard, the voice of the truth. Let’s do our duties before demanding our rights.

Written by: Belaoucha Brahim

2011: Manuals for conserving paths

1] The path begins with a crossroads. There you can stop and think what direction to follow. But don’t spend too much time thinking or you’ll never leave the spot. Reflect a lot on the choices that lie ahead, but once you have taken the first step, forget the crossroads for ever or else you will always torture yourself with the useless question: “did I take the right path?”

2] The path doesn’t last for ever. It is a blessing to travel the path for some time, but one day it will come to an end, so always be prepared to take leave of it at any moment. However enraptured you may be at certain landscapes, or scared whenever you have to make a great effort to go ahead, don’t get too used to anything. Neither to the hours of euphoria, nor to the endless days when everything seems so difficult and progress is so slow. Don’t forget that sooner or later an angel will appear and your journey will reach an end.

3] Honor your path. It was your choice, your decision, and just as you respect the ground you step on, that ground will respect your feet. Always do what is best to conserve and keep your path and it will do the same for you.

4] Be well equipped. Carry a small rake, a spade, a penknife. Understand that penknives are no use for dry leaves, and rakes are useless for herbs that are deep-rooted. Know also what tool to use at each moment. And take care of them, because they are your best allies.

5] The path goes forward and backward. At times you have to go back because something was lost, or else a message to be delivered was forgotten in your pocket. A well tended path enables you to go back without any great problems.

6] Take care of the path before you take care of what is around you. Attention and concentration are fundamental. Don’t be distracted by the dry leaves at the edges or by the way that others are looking after their paths. Use your energy to tend and conserve the ground that accepts your steps.

7] Be patient. Sometimes the same tasks have to be repeated, like tearing up weeds or closing holes that appear after unexpected rain. Don’t let that annoy you – that is part of the journey. Even though you are tired, even though certain tasks are repeated so often, be patient.

8] Paths cross. People can tell what the weather is like. Listen to advice, and make your own decisions. You alone are responsible for the path that was entrusted to you.

9] Nature follows its own rules. In this way, you have to be prepared for sudden changes in the fall, slippery ice in winter, the temptations of flowers in spring, thirst and showers in the summer. Make the most of each of these seasons, and don’t complain about their characteristics.

10] Make your path a mirror of yourself. By no means let yourself be influenced by the way that others care for their paths. You have your soul to listen to, and the birds to tell what your soul is saying. Let your stories be beautiful and pleasant to everything around you. Above all, let the stories that your soul tells during the journey be echoed at each and every second of the path.

11] Love your path. Without this, nothing makes any sense.

Paulo Ceolho