Message from the Editor

Hello Engineering Family,

Many of you have been asking, where is the ESFB January Issue? I did not forget about it! In between school and engineers week, the ESFB newsletter just wasn’t making into my weekly priority list. This newsletter is intended to serve as a communication tool for students, faculty and staff. We are always looking for constant feedback to improve the quality of the newsletter.

In addition, everyone is welcome to submit an article. I am saddened that we still do not have a name for our newsletter. :( HELP US !!!!!

Sincerely,

Vanda Ametlli

All students, faculty & staff are encouraged to submit articles

SUBMIT YOUR ARTICLE!

To: ESFB@eng.wayne.edu
My name is Philip Swanson, and I am in my third year as an undergraduate student at Wayne State University. I chose to major in civil engineering because my father is a civil engineer who has spent the majority of his life working in the natural gas industry. Civil engineering is a relatively nonspecific engineering major which provides a wide variety of subjects in school and also provides job opportunities in various fields which is what I was looking for in a major.

I also am on the Wayne State University Baseball Team. The challenges I face as a student/athlete are mainly associated with the time commitment necessary for being both a student and an athlete. In the fall semester when we are in the offseason, we work out three days a week with conditioning afterward and have practice every day through September. In the spring when we in season, we work out three days a week and have practice every day through the entire semester. This obviously does not include the 52 games we play in the spring which forces us to miss a lot of classes. We also host kid’s camps over winter break and also during the winter semester on weekends. Through baseball, every player is also required to be a part of either Big Brothers Big Sisters of Metropolitan Detroit or the Local Intervention Network for Kids. This is a once a week event where we go to local schools and help kids with their homework and play games with them. An important part of being on the baseball team at Wayne State is making sure we give back to the community since we are given such a wonderful opportunity to play baseball and get an education here. On top of this, we are required to individually raise $1000 to fund our spring trips to play down south since we do not have the luxury of warm weather during the spring in Michigan. All of this makes it tough to be successful in school; however, it is possible. Last year I was the recipient of the Dean’s Award for the College of Engineering for having the highest GPA of all the athletes in Engineering.
FL STUDIO: THE NEW GENERATION OF MUSIC PRODUCTION

By: Frank Addo

It’s amazing how rapidly technology has advanced over the past several years. Twenty years ago one would have thought that in order to create music, you had to spend tons of hours and money at recording studios. In today’s fast-growing technological world, there are a plethora of possibilities in the development of music. It is now possible to create, edit, mix and even master music in the comfort of your own home.

Image Line’s FL Studio (Fruity Loops) software has made its mark on the music industry by enabling users to have access to thousands of sounds, effects, vocals, samples, and loops to assist them in enhancing their musical abilities. You can create amazing sounds in just a few minutes. Even some of the top professional producers have utilized the software to create chart-topping hits within the last couple of years.

Comparable to similar programs, FL Studio is less complicated, more user-friendly and less expensive. Whether you are an aspiring producer, composer, singer, performer, or simply want to find a new hobby, FL studio is definitely a great starting point. I would recommend anyone to explore their creative side with the help of this wonderful program; as time progresses you might develop a genuine passion for music and the technical aspects of it.
Student Organization Spotlight:  
Warrior Racing  
Written By: Lex Dodson  
SAE-WSU President  

Warrior Racing is a small team of students who build a small-scale racing car according to the rules of the Formula SAE series, organized by the Society of Automotive Engineers. Our goal is exposing students to engineering through the complex problem of motorsports. To that end, every member of the team is held responsible for a specific aspect of the vehicle. Our car is student-designed and assembled, and most of the major components are machined and fabricated by hand in Warrior Racing’s machine shop.

Our current racer, RW6, showcases a custom dry-sump oiling system, brand-new suspension geometry, the **lowest weight** of any Warrior Racing vehicle so far, a state-of-the-art engine computer, custom air intake system, student-designed and-built electronics and data acquisition, and a 4130 steel tube frame hand-welded by students. These systems are possible thanks to the Generous support of 23 sponsors, including Ford, Yazaki, Meiden Technologies, Thomas and Betts, and NGK. Our current goal is the completion and validation of our car by July 2010, in time for a shot at a top-ten finish in a field of eighty opponents at the SAE West competition at the Autoclub Raceway in California.

Society of Automotive Engineers  
1530 EDC  
(313)577-3829  
warriorracing  
@eng.wayne.edu
24-Conversation Openers

By: John Herbon, Mechanical Engineering

When in an Elevator
“Earlier today I shot my old partner, a friend of mine, because he tried to stop me from doing what I have to do. Don’t think for a second that I won’t do that to you.”

When Pulled Over for Speeding
“Officer, this guy is not waiting around for me…so you better shoot me or help me…but decide now.”

When Making an Apology
“You betrayed me too. I’m just better at it than you.”

When Negotiating a Lease Agreement
“I have killed two people since midnight, I haven’t slept in over 24 hours. So maybe…maybe you should be a little more afraid of me than you are right now.”

When on a Plane
“I used to be in the military. Used to do field work for the CIA. I’ve been to some horrible places. I’ve seen some pretty terrible things. I don’t think I’ve ever been this scared in my whole life.”

When Carpooling
“Let’s get something straight, kid. The only reason you’re still conscious is because I don’t want to carry you. Now get in the van.”
Brain-Computer Interfaces: Evolving Communication

By: Daniel Sobczynski, Chemical Engineering Student

If someone told you that he/she could move objects and perform tasks with his/her mind, what would be your response? Perhaps, you might politely remind that person that the Star Wars series were movies, not reality. However, current research exists today that involves precisely that level of technology. It is the development of brain-computer interfaces, or BCI. With eventual applications ranging from high-tech video gaming to downloading data directly into the brain, this research is limitless.

BCIs aim to create effective electrical circuits with the brain. The sequence that allows for thoughts to be converted into actions involves the brain, an electrode, and computer software. Thoughts cause a release of electric signal from the brain to the surroundings. This signal can then be captured by the software through an electrode that is either attached on the skull or implanted to the brain. Once this signal is interpreted, it can be displayed to witness the execution of a certain task.

One common focus of this research involves discovering a way for the brain to respond to injury and disease, known as neuroprosthetics. At this point, the cost of pursuing these research areas and projects is prohibitive. Also, implantation of electrodes in the brain causes formation of scar tissue. Some investors may be willing to market such research aims with the hope of its potential high growth and ability to overcome these complications.

However, what also need to be explored are the ethical aspects of this technology. Consider how the Internet, e-mail, and text messaging have radically shaped our lives socially and the many ethical issues that are still being debated regarding the limitations of this technology within our society. With the possibility of telepathic communication, our very thoughts can be known to another without a word ever spoken, redefining the barriers of conventional types of communication.

While this type of technology has undoubtedly numerous positive applications, such as the ability to aid Alzheimer’s patients and others with neurological disabilities, what need to be put into place are the parameters and ethical regulations. Equally important to discussing the reality of this cutting-edge technology is establishing fundamental guidelines that enable this mind-altering technology to improve our society and at the same time prevent its abuse of the community and those it is meant to help. One need not look too far to see the consequences of text messaging, e-mails thought to be “deleted”, and the privacy challenges that arise.

If the current technology has drastically altered our lives, imagine the power of integrating BCI systems in everyday situations. It is crucial that we explore all its possible effects before it becomes a reality.
Illusion of Reality
Poem By: Vrushen Pathak

A day full of sunlight
Telling me, I too have got might
Thinking of some majesties of this life
Willing to have their privilege all the time;

Thoughts wear off gradually
As tend to open eyes gradually
Trying to sense the existing fully
Feeling the battle that I am supposed to be facing;

Preparing to head for its field
Unknown of if there’s any victory yield
Hearing the unheard sensation, of weapons shrill
Announcing the time to ride for the thrill;

The vision of sight is of greatest war
Mind trying to find, whom you are fighting for
Unsurprised to find, nobody caring for else’s loss,
All fighting for everything, except a noble cause;

Am fighting without knowing for whom to fight
Never thought, the direction am heading, wrong /right,
Pretending to be, but not understanding “KNIGHT”,
Trying to see everyone with a limited sight;

Every now n then feeling to give up
Wish to pretend like others n take a gulp
But that’s where I always get stuck up,
With a desire to know the truth where I am held up;

Want to understand, is it reality or illusion,
Need to find am I in confounding or confusion?!!
Or I have already reached a conclusion!!!!!
Sometimes questioning myself, “does it really have a solution?”

Still heading in the battle field, which seems endless,
Moving in light where everything still nothing is scarlet,
Suddenly reaching a point where the battle field seems a carpet,
Now getting crystal clear answers, as if it’s a catalytic aspect;
POEM Continued

Seeing & analyzing, seeing & analyzing,
Found & understood something very paralyzing,
Came to know that it was path of life, hosting none other but the “battle of living”,
Inspired to ride back again, ‘coz now I have what I didn’t earlier, reason & direction of riding.

Someone has rightly said:

“Life is a battle fight it”

I would like to add to it:

“Do it for a reason and with a direction to win it”

Vrushen M. Pathak

College of Engineering Upcoming Events

Feb 24th— ESFB Meeting
March 3rd— Town Hall Meeting with Dean Usmen
April 16th— Honors Convocation
May 7th— Engineering Commencement
May 10th— Spring/Summer Classes Begin
So you’re graduating ...

What is AfterCollege?

“AfterCollege is an online professional platform that connects college students, alumni and employers through customized career networks at colleges and professional organizations across the country.”

How can you Join?

Each engineering student organization has a specialized AfterCollege page which you can find by visiting, www.eng.wayne.edu/studentorgs.

The website offers job search for full time and internships. In addition, it gives away many engineering scholarships!!

Join a Student Organization!

| American Institute of Chemical Engineers | Engineering Graduate Student Association | Society of Automotive Engineers |
| aiche@eng.wayne.edu | egsa@eng.wayne.edu | warriorracing@eng.wayne.edu |
| American Society of Civil Engineers | Engineering Student Faculty Board | Society of Hispanic and Professional Engineers |
| asce@eng.wayne.edu | esfb@eng.wayne.edu | shpe@eng.wayne.edu |
| American Society of Mechanical Engineers | Intelligent Ground Vehicle Competition | Society of Women Engineers |
| asme@eng.wayne.edu | igvc@eng.wayne.edu | swe@eng.wayne.edu |
| Biomedical Engineering Society | Institute of Industrial Engineers | Tau Beta Pi (Engineering Honor Society) |
| bmes@eng.wayne.edu | iie@eng.wayne.edu | tbp@eng.wayne.edu |
| Collegiate Entrepreneurs’ Organization | Institute of Electrical & Electronics Engineers | Theta Tau (Engineering Professional Fraternity) |
| ceo@eng.wayne.edu | ieee@eng.wayne.edu | thetatau@eng.wayne.edu |