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STUDENTS ARE WORKING
ON TWO UNIQUE MULTIDISCIPLINARY PROJECTS
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http://www.ece.ucsb.edu/lite



LEADERSHIP IN TEAM ENGINEERING
DEVELOPING TOMORROW'S LEADERS THROUGH
INNOVATIVE COMMUNITY PROJECTS.

The importance of the "superstar" is quickly fading as companies begin to see that two heads -or more- are better than one. Good team-work has become the name of the game. So how do you prepare yourself for industry's new requirements?

Invest for the future with valuable experience

To some students, the word "teamwork" sounds like an exercise in Ms. Johnson's third grade class. In fact, most engineering students participate in little or no team oriented projects at all. However, the engineering industry is filled with large scale projects ranging from programming Windows to developing the next iPod. Its no wonder some students feel ill prepared for the work place.

The LITE program (Leadership in Team Engineering) believes that successfully educating leaders requires focus on several fronts:

- 1) Hands-on experience
- 2) Enthusiasm for collaboration
- 3) Problem solving skills

By partnering with leading community organizations to identify challenging projects, we give students the opportunity to hone these skills. They will work with new technology not taught in the class room as well as applying engineering fundamentals in real world situations. All this in the context of multidisciplinary teams.

The LITE program is unique due to the positive impact of *cross-pollination*. When community organizations receive expert help from the University's best and brightest they not only find solutions but also the confidence to explore bigger and better ways of serving the community. Students are empowered by the significance their knowledge has in promoting change. They really can change the world.

Inside you will find a synopsis of our current projects and support information!



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Young visitors protected with new wireless safety net

How new technology can make going to parks or large events a worry-free day for mom and dad.

piece of mind to par-

ents so the whole

family can enjoy

HEATHER JOHNSON

ASST. EDUCATION CURATOR

Hundreds of visitors walk through the exhibits of the Santa Barbara Zoo each day. Whether its a family day out or a school field trip, the safety and whereabouts of children is always something

A team of students in the LITE program will tackle that challenge by designing and implementing a wireless

to worry about.

security system for young visitors. Because the zoo offers many interactive

events, the new We want to bring need to be robust and flexible. Other considerations such as size, intrusiveness, cost and durability

among other things, will all be put on the table for the students to design around.

The idea of wireless security is just beginning to gain mo-

mentum. For instance, Legoland of Denmark is testing out a new RFID child secu-

> rity system this year. The LITE team is not far behind!

their time at the zoo. ? In the end our main goal is to help "...bring piece of mind to par-

> ents..." says a zoo representative. The students understand that and they are ready to apply innovative technology to make it happen.







Intelligent tracking and monitoring system for rail lines

Reducing the lines and increasing the fun for Santa Barbara's most popular train ride.

...we are confident that

it will inspire many

children to careers in



Zooming down the speedway, there is only one thing faster than a F-1 car: the electronic

signals sent from the car to the pit. With today's science and engineering technology

everything from planes to trains are tracked and monitored to increase safety and to optimize performance.

So now is a good time to upgrade the ever popular train ride at the Santa Barbara Zoo. A team of LITE students will design a two stage system for electronically managing the train.

The first would be a comprehensive tracking system for the whole fleet of trains. While the other is a

monitoring system that indicate arrival times, capacity and other vital information for operators.

Eventually we hope to use this technology as a spring board to educate visitors young and old on science



and technology. Once people see how these new devices can create positive change, we are confident that it will inspire many children to careers in science and engineering.

Become a sponsor

Engineering solutions and helping the community is a team effort. So naturally the LITE program welcomes all forms of help. Discover for yourself how best to show your support!

Financial Support

Financial gifts go along way in covering all the needs of the LITE teams. Your generous gift goes toward:

- **Team expenses:** Our program stresses the need for prototyping. The ability to bring ideas to life is all part of the design process. Your gift will go towards materials and equipment that will help teams breathe life into their designs.
- Student Presentation Opportunities: Public speaking is an integral part of being a professional engineer.

 Moreover, for students there is no better feeling than getting the chance to present their hard work in public.

 Funds will be used for display boards, general handout materials and other presentation needs.
- **Awards and Recognition:** No one should go unnoticed for their hard work and contributions. LITE readily acknowledges the time and effort of students, leading community members, and faculty who have made a positive impact in the LITE program.

Leadership Support

Your involvement in the LITE program can benefit many students and community programs. Some of the ways Leadership support is directed are:

- Guest Speaker: Share your professional experience with students.
- **Team Advisor:** Help direct student teams or lend a technical hand by being a team advisor.



• Corporate Champion: Be a hero and champion the LITE program at your work place.

<u>Resource Acquisition:</u> Leverage resources from your employer to help sponsor an LITE team.

<u>Leadership Identification:</u> Help identify leaders in your organization who might also become future advocates for the LITE Program

