Prosperous second year for TIES program!

- Student enrollment doubled, averaging ~70 students/quarter.
- TIES students would highly recommend program to others.
- Increased Community Partners/Clients from 2 to 8.
- 2 new projects for 2006-2007 academic year: Medical School Student-Run Free Community Clinic and myTIES software upgrade
- Increased corporate support from National Instruments, Microsoft, HP, & Northrop Grumman through donated software and hardware.
- 10 summer 2006 interns will help in team continuity.

A meaningful experience for a visual arts student

Joining TIES and having the opportunity to work with a team of engineers, has been a wonderful experience for me as a visual arts student. Typically, engineers have a different mindset from artists. However, I feel all of us in the United Cerebral Palsy team, have benefited from those differences. With engineering, a specific end product is usually in mind. In art you can sometimes end up with something far different from your original goal. TIES allowed us to bring two opposites together, enabling us to work as one team for one common goal. I have learned through TIES that there is a lot of creativity, exploration, and innovation in engineering. We were able to make something that was meaningful, impacting a huge number (cont. pg. 4)

The Lakeside teams displaying observation deck & bridge designs, informational kiosk flow diagram, and water quality prototype development at the groundbreaking community event, River Day.

Lew Lipton (Kiosk advisor), Daniel Su, Nick True, Jeanie Kwok, Kenton Roberts, Tony Aung, & Stephen Bak
Micah Bayless, superhero leader of student orgs, cars and ethics

Life is a highway, an open road of endless possibilities for the TIES TA of ENG100, Micah Bayless who recently received the 2006 Undergraduate Leadership Award from the Jacobs School of Engineering. Micah spoke about engineering ethics during ENG100 and the societal impact of an engineering education can have. Micah served as 2005-2006 TESC president and oversaw numerous programs including DeCAF and 2006 Ring Ceremony of Engineers at UCSD. We congratulate Micah on his award, knowing that this is only the start of a long and prosperous road of success for this young aerospace engineer.

DigiNurse wins first UCSD I2P™ Social Entrepreneurship competition

Our first Idea-to-Product® competition created fierce competition between two United Cerebral Palsy (UCP) teams and the St. Paul’s Digital Nursing team. The quadricycle product from the UCP team of Casey Jowers and Vasilios Ikosipentarhos, brought back wonderful childhood memories for most of the I2P™ judges. The electronic button pusher team, lead by Alina Kim, aided children with disabilities to access toys with simple, but hard to reach, buttons. However, the dynamic presentation of the software package, DigiNurse, developed through user-centered design won the 2006 UCSD I2P™ Competition. A truly multidisciplinary team of students, Loren Baxter, a cognitive science student, Taurin Tan-Atichat, a computer science student, and Raj Kumar, a mechanical engineering student, are dedicated future entrepreneurs. Taurin, now upon graduating, said that he will definitely remember the joy he received from being able to help the community client by employing an engineering solution to solve a real problem; TIES is an extraordinary place to learn through the experience of doing.
A blast from the past … a letter from a TIES alumni now at Apple

My name is Chris Lee. I was part of the DigiNurse project for its initial year, 2004-2005.

Hindsight is 20/20. I can honestly say that DigiNurse was the best project, activity, or class that I took part in at UCSD. There are very few opportunities in college that allow one the freedom and resources to develop a product that will truly be used in the real world by actual people. There are countless projects in college where students undertake challenges that are very fulfilling, but very few of these projects see daylight or the real life user they were designed for. The engineering, communication, project planning, and teamwork skills that are employed during a TIES project most likely prepares one more for industry than any other opportunity in college. I know this sounds like a sales pitch to join TIES, but I can say from personal experience that the skills you are developing will help you in the real world and the team experience will help you land your first job.

During my job interviews, the first and main topic people wanted to talk about was my experience in DigiNurse. Interviewers were always impressed that we worked on a project that actually shipped to our users. After college, I got a job at Apple Computer working as an Engineering Project Manager for Mac OS X. In this position I see a lot of the processes across the board for software development. DigiNurse faced the same issues of defining the product, development processes, prioritizing tasks & shipping. Granted, we deal with these problems on a different scale, but the bottom line is the stuff learned through TIES really matters. Keep up the great work!

Reflection of one year with TIES from the water quality 2005 summer intern

I am extremely grateful for the day Glynda Davis, ESS TIES student director, walked into our SHPE meeting to talk about a new and innovative program called TIES. She convinced me! Upon joining TIES (spring 05), my professional growth was accelerated. I have been able to exercise my team-building, leadership, and communication skills in a way that no other class has been able to match. The opportunities and benefits of joining TIES do not stop there. They go way beyond the these professional areas. The networking among the team members, client, advisors, and industry is priceless and rewarding. Doors opened for me to new worlds that have drastically changed my professional and private life just, and it could happen for others too!
TIES collaborative lab serves various functions for multidisciplinary teams

The need for a collaborative space for multidisciplinary groups of students to conduct research, build prototypes, conduct meetings, and develop software was met by the TIES lab, generously allocated from the dean’s office.

Stellar TIES graduating seniors are embarking on exciting new adventures

- **Arwa Kassamali**, a BENG student from the SF and K12 teams will be working in Sydney, Australia in a Biotech company conducting research and product development.
- **Evan Sharbrough**, a BENG student on the EM team will investigate alternative sources of energy in microbial fuel cells for hydrogen production at Oregon State University.
- **Vincent Kapur**, an aerospace student on the K12 team, will perform stress analysis for D3 Technologies on the fusilg of the F-35 Joint Strike Fighter, the newest fighter jet of the US joint forces. Security clearance is needed.
- **Alexandri Zavodny**, a CSE student on the DVS team, will conduct image processing research at Calit2.
- **Christine Liang**, an ECE student on the Kiosk team, hopes to join the 5 year BS/MS program in the ECE department at UCSD.
- **Edward Park**, a CSE student on the DN team, will start working at General Atomics Aeronautical Systems.
- **Vikrum Singh Nijjar**, a CSE student on the SF team, will be joining the NCMIR Telescience group, innovating for the visualization and parallel computing team.
- **Taurin Tan-Atichat**, a CSE student on the DN team, will begin his MS in Computer Science through the 5 year BS/MS program at UCSD.
- **Humair Khan**, an ECE student on the DVS team, is embarking on a two-pronged career path: working at National Semiconductor in Santa Clara and attending San Jose State to obtain an MS in Electrical Engineering.
- **Fabiola Hatley**, a Chem Eng student on the EM team, is an intern at SOTA Environmental Technology, Inc., an environmental consulting firm, where she collects water and soil samples, analyzes lab reports, creates concentrations contour maps, and writes assessment reports.

CONGRATULATIONS!

Experiencing team engineering from a visual arts perspective

of deserving people. Art is meaningful in itself. TIES achieves that level of meaning in a different way.

How would I significantly impact my team? My greatest contribution to the team has been as a facilitator, the communicator of ideas, a coordinator of goals, and documenter of progress. I was intimidated at first by my fellow team mates. I did not have the level of technical math and engineering skills like they did. TIES enables everyone to go beyond their initial fears and to think outside of the box. I learned about interacting with people, the human side of a team project. As a non-engineer I feel like I have helped to implement and guide the vision of this technical project. My work with the UCP TIES team has been one of the most meaningful experiences during my time here at UCSD.

– Lynn Wu, Visual Arts, UCP web site team member 2005-2006