2009 ENDS WITH AN ANIMATED BANG!

ANIMATED 2009
A LOOK BACK AT LAST YEAR’S ANIMATED GEMS

ACADEMIC DARWINISM
TIPS AND TRICKS FOR SURVIVING CLASS REGISTRATION

COVER BY: JEANIE CHOI & TERRIS JOHNSON
AT A GLANCE

ANIMATED 2009

We take a look back at many of the 2009 animated features, calling attention to the techniques and technology, stories and characters, and the impact and influence these films have had on animation as a whole.

THE FITTEST SURVIVE!

Assistant Dean of Students, Tom Pilsch shares some tips, tricks, and secrets for registering for your classes Charles Darwin style!

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WWW.GTFIREWALL.COM
Hello, students of the College of Computing!

I would like to present to you the back to college edition on behalf of the FIREWALL team. This issue presents articles on a variety of topics, ranging from academic Darwinism to animation reviews.

Whoa. Sorry for not introducing myself!

My name is Karthik Narayan, and I am the current president of the FIREWALL. I am a second-year Computer Science major with threads in Intelligence and Information Internetworks. You may have seen me around the commons, or know me if I have been your TA for data structures or objects and design.

If you haven't seen me around, shoot me an email, and we can talk! Have an article or an idea for an article you want someone to write? Pitch it to us, and we'll see what we can do to put it into place. If you're really interested, drop by one of our meetings, on Mondays at 6 - 7 in Room 354 of the College of Computing, and see if the FIREWALL is right for you. From writing to layout editing to marketing and advertising, many spots are open for hiring.

The FIREWALL team has quite a lot planned for you this semester, so sit tight... here's to a new issue of the FIREWALL, and a new year! 

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Experience is welcome but by no means necessary!
BY KLEE SIMMONS

Every major in the College of Computing requires at some point for its students to take LCC 3401. It is not particularly exciting, or enjoyable, or noteworthy; TCP is just one of those courses a student has to take to graduate, like an Ethics class or a Humanities Elective.

It is one of those courses where students are required to create effective resumes, web pages, and manuals in an effort to improve their communication abilities. They give presentations and are required to incorporate multimedia into the different assignments.

On the surface the course seems borderline interesting with aspirations to creativity and individuality. However, several students have found after taking the course that the assignments are often irrelevant to real life situations or presented vaguely. Additionally, this course takes a much less structured form, which, combined with often unclear directives, can lead to a more difficult learning environment.

Not all versions of a class are taught the same, however, and the version of TCP taught by Professor Daniel R. Vollaro is as different from the typical Tech class as any course you will take in the four, five (or even) six years spent here at our illustrious university.

Professor Vollaro’s course “employs a “client-based” approach to teaching technical communication by matching students with real clients to complete semester-long information design projects.” What this means is that the students in his class are divided into several groups and are tasked with completing real assignments for various non-profit organizations in many different fields of work. The students choose one of four roles for the semester long course, including Project Manager, Managing Editor, Graphic Designer, and Writer/Researcher.

In another break from your ‘typical’ class, grading for all assignments is significantly influenced by the client’s satisfaction. Students in the two managing positions
within a group will also have some say as to how the group’s performance will be evaluated. To prevent abuse of the position, the professor personally interviews any student who applies for a management position so he can be assured he gets, “the best possible student for the work at hand.”

Unlike almost any other course here at Tech, Prof Vollaro gives most of his lecture periods over to in-group work, with the bulk of his lecture material coming right from the work done during the semester. To paraphrase him, “I might spend the first twenty minutes of a class period show-casing an incredibly well written introductory email from one of the companies to a student group and engage in discussion with the class as to what aspects of the email made it so effective.”

In previous semesters, students have worked closely with Girls on the Run, The Bridge, Atlanta Union Mission, and several other corporations. In a neat twist, a student’s performance in the classroom can result in more than just an ’A’ for the course. After a successful semester working for Bennett Aerospace to create a novel and user-friendly website, the project manager for the student group was asked back to work for the company upon his imminent graduation.

When asked why he teaches his course in such an unorthodox fashion, Professor Vollaro replied, paraphrased, “I love teaching. Research is nice, but my first focus is on educating the students who enter my classroom. To be taught properly, Tech Comm needs real audiences with significant stakes at hand. In my course, you will work harder than you might initial expect, but you will be well rewarded for your efforts. A general shortcoming in the Tech fields is communication. It’s easy to find graduating students with Engineering skills. It’s much harder to find that plus strong communication skills.”

When asked if he had any final words to tell prospective CS majors considering taking his course, he said, “The majority of my class consists of IE students, but none of the corporations are engineering specific. In fact, I’d really like more CS majors because I’d love to do more with web design and its associated applications. In fact, I’d be perfectly willing to teach a CS-only version of my class if I had enough interest.”

If you are interested in learning more about Professor Vollaro or his course, please visit http://www.vollaro.com/Dan/index.html, the firewall website, or email me at klee.s.simmons@gmail.com

LCC 3401 COURSE SUMMARY

LCC 3401 IS DESIGNED TO INTRODUCE STUDENTS TO THE TYPES OF DOCUMENTS AND COMMUNICATION ABILITIES REQUIRED BY THEIR FUTURE PROFESSIONS.

THE COURSE FOCUSES ON AN UNDERSTANDING OF BOTH VISUAL AND VERBAL RHETORIC IN APPLICATION TO TECHNICAL DOCUMENTS.
BY TOM PILSCH
ASSISTANT DEAN FOR STUDENTS
My family calls them "momilies and dadages," those short, sometimes witty, usually self-evident life lessons that moms and dads and other elders pass along to the younger generation ... which promptly ignores them.

Several of these bits of wisdom might be relevant to your academic experience ... if you are willing to listen. You likely have heard them before, but several of your classmates have recently suffered some painful and expensive consequences by ignoring these lessons. Maybe you can learn from a rehash of their poor judgment and experience.

"THE RACE GOES TO THE SWIFT."

This should be a corollary of Darwin's Theory of Evolution and his "survival of the fittest" thesis. In the evolutionary competition for food, domain and propagation rights, the fastest, strongest and smartest survive and prosper. Those with lesser attributes are eliminated from the gene pool. It is a cruel world.

The numbers of classrooms and faculty, however, have not changed anywhere near in line with this demand growth. During the Spring 2010 registration cycle, some students could not get into classes they wanted because the classroom was filled to its legal limit, and we could not work in "an extra seat or two" without risking fines for violating OSHA and other regulations. We cannot afford that.

"THE SEATS GO TO THE SMART."

We have a similar resource competition here at Georgia Tech. For you, the scare resource is the number of seats in the courses you want or need to graduate. Over the past few years, the number of students at Tech has slowly increased every year. Similarly, the number of programs and courses has increased.

This is one I made up — it's Darwinism in your academic world. Just as the individual animals and entire species that Darwin witnessed surviving and prospering in the jungle, forest or plains through superior speed, strength and
The academic jungle doesn’t need to be as scary if you come prepared. A little time spent planning and a little effort to observe the environment for signs that the registration lions are coming will pay big dividends. Knowing what you need to progress toward graduation and being ready to register as soon as your time ticket opens will allow you to enjoy life at your favorite watering hole while the competition is scrambling to fill their schedules rather than fill a lion’s stomach.

The cycle for Summer 2010 and Fall 2010 registration begins March 24th.

Start planning NOW!

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*Momilies and Dadages: adopted from “homilies” (stories of advice or warning) and “adages” (traditional sayings or proverbs). Attributed to Andrew Pilsch, CS ’05, STAC ’05
RESEARCH OPTION

WILL YOU TAKE THE RESEARCH, OR THE OPTION?

BY ASHISH NARASIMHAM

Yes, the option of research. Will you take the research, or the Option?

This is a question posed by many. In case you were wondering, what I was referring to above was the choice between research and the Research Option. These two things, although one word apart, refer to completely different things here at Tech. The Research Option is offered to undergraduate students seeking a more involved approach than that of just research. While research puts a student in an environment in which he must put together a project of his choosing, the Research Option asks students to write a proposal, research it, and publish their findings. The student is also encouraged to speak about it and inform others of his new findings.

Karen Harwell, Director of Undergraduate Research at Tech, said, “The program is designed to guide a student through all cycles of research... In the Research Option, most students develop their own ideas. Completion of a major research project and... a thesis are indicators to graduate schools and employers of higher [excellence] in research.” The commitment and dedication are what set one research student apart from another. Few do research, but even fewer do the research option. “Eighty-two students have graduated with the option through Spring 2009. Of those students, 12 have been from the College of Computing,” Harwell said. Only 12 from the College of Computing. Imagine what kind of advantage you’d have if you were one of those 12.

But that’s not what the Option is about. If you’re doing it just for the resume, you might as well not do it, because employers and anyone else you can think of will see right through that. You should do it because you love it, not because other people want you to do it.

Indeed, there’s a paper involved, the thesis paper. “Typical theses will contain an abstract, introduction, literature review (or background information section), a section to pose the research problem, results, and conclusions. References are
required and appendices of additional information are often presented,” Harwell said. The thesis no pushover of a paper though, so don’t get yourself into trouble by picking the wrong one and regretting it. Do some research on it and get a good feel for what you think you’ll be able to commit yourself to. It will be nothing short of a lifesaver later on.

One other requirement is that the nine credit hours of research be completed over 2 (preferably three) semesters. Additionally, you can get paid for your research instead of getting credit for it, which is a viable option if you’re looking for some extra money along the way or have enough credit already. The CoC also offers an option that could help you; you could get three of the nine hours from CS 4980, the Research Capstone project. As you can see, there are many things to consider when delving into the Option.

If you’re thinking about going into the scientific world, you almost need to do this. It’s a great introduction to the area and takes you through one whole iteration of researching. “The program is designed to guide a student through all cycles of research – from conceiving an idea for a specific project to developing the goals and objectives for the project to completing the research to disseminating the results through oral presentations, posters, and an actual thesis,” Harwell said. You’ll have the upper hand on the processes involved, which can often be a big help.

Some examples of past research topics that may be of interest follow. Approximation algorithms for finding planar and highly connected subgraphs, computer animation of multi-legged creatures, creating your own innovative programming languages, working with databases to make them more efficient, and many projects involving robots. These are some of the topics that have been researched in the past, just to whet your interest or spark an idea that you could approach a professor with.

“You CAN GET PAID FOR YOUR RESEARCH INSTEAD OF GETTING CREDIT FOR IT, WHICH IS VIABLE OPTION…”
BY JEANIE CHOI
The decade of the twentieth century was marked with a great explosion in the computer graphics (CG) scene. CG animation advanced at dizzying rates as industry giants such as Pixar and Square Enix pushed the medium. The old ways of hand-drawn animation seemed over, since even its founding father, Disney, had given up on it. Regardless of what seemed to be traditional animation’s demise, new domains of animation flourished. Flash animation by individuals dominated the web, and phenomena such as Potter’s Puppet Pals and Charlie the Unicorn graced every screen in all their sing-song obnoxious glory. Foreign indie studios also gained recognition for more serious animation such as the stark black-and-white Persepolis. New CG animation studios began popping up to challenge Pixar’s domain. Directors raved over motion capture, and people raged over Uncanny Valley (a symptom of eerie undead people found in increasingly photorealistic animations; example: The Polar Express).

As the first decade prepared to pass by, movie enthusiasts and animation nuts were treated to a grand finale of stellar top-tier cinema and animation in 2009. For the first time since 1940, ten nomination slots will be open for Oscar’s best picture. A record 20 animated films are under consideration for best animated feature, bringing up the nominations to a record of five slots. A wide variety of animation styles was also well-represented on the screen, when many had assumed the older forms were dead. Two strong contenders actually are stop-motion, and very different styles of stop-motion, at that. Many of these notable animated features are firsts for some of these studios.

CORALINE
Release: Feb 6
Studio: Laika
Distributor: Focus Features
Directed by: Henry Selick
Coraline, based on a novel by Neil Gaiman of the same name, follows the titular heroine who, dissatisfied with the dull grey-toned world and the lack of companions and parental attention, is
lured into a more vibrant, warm version of her world. Coraline is a refreshing and realistic youthful lead whose mannerisms mirror those of a real inquisitive 11-year-old. The contrast between the dull, washed-out monotonous colors in the real world and the rich fanciful imagery in the parallel world is striking, and the dark, gothic undertones below the colorful, friendly surface creates a tense suspense that builds as Coraline's situation becomes increasingly dire. The film's look and feel is directed by the same man behind the equally-stylish Nightmare Before Christmas, with the same strange mixture of innocence and gothic. Coraline is the feature debut of Laika, a fairly young studio that has gained much recognition for its work on commercials. The studio has recently decided to focus on stop-motion animation, making this studio a possible stop-motion powerhouse in the near future.

UP
Release: May 29
Studio: Pixar
Directed by: Pete Docter

Pixar delivers what many have called their most sophisticated animated feature as of yet, with a tale on letting go and learning to open the mind to what is yet to come. The tale is fairly unconventional, even for Pixar, with a grumpy square old man for its lead and its locale, a remote location in South America. The grumpy old square is a recently-widowed Carl Frederickson, who, after the heartbreaking loss of his beloved and lovely wife Ellie, has become reclusive and stubborn. Determined to carry out his promise to Ellie, Frederickson devises a means of escape via an innumerable number of balloons towards Paradise Falls, South America. Along the way the lonely Russell, loveable Dug and quirky Kevin barge into Frederickson's life. The film is laden with imagery and symbols that poignantly expresses Frederickson's current frame of mind. Especially notable is the emotional power of the opening sequence; in a compact wordless montage, the character of Ellie and their love for each other plays in mere minutes, yet the emotional impact of that scene prevails throughout the film. Pixar proves once again that they are masters of storytelling with Up, and for the first time since Beauty and the Beast this animated feature may receive the elusive Oscar nomination for Best Picture.

PONYO ON THE CLIFF BY THE SEA
Release: July 19
Studio: Ghibli Animation (JP)
Directed by: Miyazaki

Should traditional animation truly die out in America, great masters such as Miyazaki will continue to preserve and develop the art-form overseas. Although the film was technically released in Japan the year before, the dubbed version was released for America last year in August. The film has been compared to Miyazaki's Totoro in its return to a completely hand-drawn approach and its focus on the viewpoints of its children leads. Ponyo is a youthful twist on the classic little mermaid tale, with the main female fish who, in her innocent love for Sousuke, disregards her father's warnings to become human. Her disregard of her father's warnings sends the balance of the world off-kilter, and a giant tsunami floods the area. Sousuke and Ponyo then make their way through a Japan transformed into any kind of food the FLDSMDFR water is somehow transformed into any kind of food the customer desires. With the FLDSMDFR both Flint Lockwood and obligatory female lead Sam Sparks enjoy a rise in their career. Unfortunately over-abuse of the machine causes malfunction: Flint must use an inventor's prowess to stop the machine and Sam Sparks must learn to let out her true nerdy self. The story isn’t complex or revolutionary, but it sets things up effectively for future events in the story to create a satisfying film in addition to the over-the-top eye candy.

FANTASTIC MR. FOX
Release: November 13
Studio: 20th Century Fox
Directed by: Wes Anderson

Wes Anderson makes his debut in animation with the second stop-motion contender for an Oscar nomination. Unlike most stop-motion fare, however, Fantastic Mr. Fox takes advantage of the...
quirky jittery qualities of the medium rather than glossing over them. The result is a refreshing truly original film experience that melds perfectly the directing style of Anderson and the quirky storytelling of Dahl. The feel of the film is very organic in its raw treatment of animation, and the semi-realistic designs of the characters make the character’s identity as wild animals transparent. The dry sense of humor and thoroughly-first Disney princess in while. Due to numerous entanglements involving political correctness and a reboot of Disney's traditional animation system, the film has changed from the original title, The Frog Princess, to its current title. Disney's return to traditional animation was mostly engineered by the chief creative officer of Pixar and now also Disney, John Lasseter, who believed that of all the animation studios in the world, machinad cinematography Anderson's films are known for also work extremely well with the medium. The fantastic Mr. Fox and his companions are also humanly flawed like most Anderson characters, and the charisma and wit of the main character helps keep the character's flaws from becoming repulsive. Mr. Fox’s desire to pull one last stunt despite the danger that it could pose to his established family and his friends is upon examination, selfish and self-serving. Nevertheless Mr. Fox coerces his friends and family to help him pull a final magnum opus of a stunt, and the animals begin a battle of the wits with the three farmers they are targeting. Fantastic Mr. Fox utilizes a new, fresh approach to animation, and executes that approach so well that many critics have highly acclaimed the film. Fantastic Mr. Fox may be Up’s most serious competition for the animation Oscar, and Wes Anderson may have found his perfect medium in stop-motion.

**PRINCESS AND THE FROG**
*Release: December 11*
*Studio: Disney Feature Animation*
*Distributor: Walt Disney Pictures*
*Directed by Ron Clements and John Musker*

Disney's Princess and the Frog endured numerous obstacles and bumps in the road before its final premiere, starring the first black Disney princess and the

two characters are drawn as distinct personalities, table of two lovers from opposing factions in a new intricately-realized sci-fi epic. The lush, fully-realized world of Pandora houses peaceful beings known as Na'vi, whose way of life is threatened by the humans who have come to mine the rich land. Through the romance between protagonists Jake and Neytiri, Jake learns of the disruptive nature of the human's acts and takes a stance against the humans with the Na’vi. The story and writing itself is lacking, with strong similarities to Disney’s Pocahontas. Nevertheless the immersive level of detail put into creating the believable environment and the impressive ground-breaking use of motion capture launches Avatar to become one of the most important films of 2009 and significant in bringing the industry closer to obtaining photorealistic animation. Also notable is the film's claim to the second highest-grossing film of all time, below James Cameron’s other phenomenon, Titanic.

A significant number of newcomers surprised the animation scene with features that pushed the medium and bringing fresh visual ideas to the screen, and Disney returned to its roots with a 2D traditional feature. James Cameron took CG animation and drove it nearly to the other edge of Uncanny Valley, to that elusive goal of perfect realism. Additionally, Pixar released what may be the first animated nomination for Best Picture since Beauty and the Beast. Animation continues to grow ever-more-ubiquitous and increasingly advanced, gracing the screens via film, commercials and video games. In this new decade of 201X, that Holy Grail of completely believable photorealistic human animation is near touching distance, and the traditional animation many of us grew up with may continue to flourish as well.

**AVA**
*Release: December 18*
*Studio: Lightstorm Entertainment*
*Distributor: 20th Century Fox*
*Directed by James Cameron*

Although Avatar does not qualify as an animated feature, the groundbreaking work in realistic animation, effective use of motion capture and phenomenal box-office performance lands it a place on this list. Cameron's Avatar retells the tale of two lovers from opposing factions in a new intricately-realized sci-fi epic.
“CORALINE” UTILIZES TRADITIONAL STOP MOTION TECHNIQUES

“PONYO...” ENLIGHTENS AUDIENCES WITH ITS 2D CELL SHADED AESTHETIC

FLINT, FROM “CLOUDY WITH A CHANCE OF MEATBALLS”. 
BY KARTHIK NARAYAN

As the internship fair has just passed around the corner, some students are still deciding what they're trying to do this summer. From civil engineering to physics to computer science, students generally say that co-oping with a company can offer many perks, ranging from an understanding of professionalism in the workforce to job opportunities with top companies after graduation. Two undergraduates, Michael McDonough, a second year electrical engineer, and Taylor Dacko, a third year aerospace engineer, co-oped with the National Aeronautics and Space Administration (NASA) this past summer. Here are Michael's and Taylor's separate thoughts on their co-op with NASA.

WHAT AREAS DID YOU WORK IN AT NASA?

Michael: Most of the stuff I dealt with was hands-on. Generally, NASA engineering oversees the engineering aspects of the Kennedy Space Center. Electronic ground support, monitoring vehicles, and testing happens in the Kennedy Space Center. I got to see the launch control centers, vehicles, and the equipment that they were working with.

Taylor: I worked with safety and mission assurance for the space shuttle, mainly mission assurance. This is the department which puts everything together by controlling the overall flow of the mission. Kennedy's space center safety and mission logistics are some of the aspects that mission assurance looks over.

COULD YOU GIVE US AN OVERVIEW OF THE TYPES OF PROJECTS YOU WORKED ON?

Michael: I actually worked on two projects. I created a software prototype to take data that was coming in from a rocket. The software took information from the rocket and placed it in a database. The information needed to come from the database and get translated into a different type of "language," so that another group could use it for a different purpose. My work involved translating the existing code into the new code. I used Java to convert between the languages.

My larger project involved helping the team that I was on to create displays that
engineers would use in the launch control systems. I was helping to prototype the software that would run in the launch control systems.

Taylor: When a space shuttle launches, we have to direct smoke away from beneath the launch pads. Debris liberation occurs, and Fondu Fyre, a special type of heat resistant concrete, spews all over the place. Earlier, a chunk of factory concrete hit a pneumatic line and bent it inward. If the line had ruptured, the entire unit wouldn’t have worked. There has never really been an issue where something important had been hit, and we decided to investigate. I worked with one of the world’s leading acoustical engineers. We tried to draw conclusions to see the correlations between the amount of Fondu Fyre jettisoned and the various properties of the Fondu Fyre. After continuously searching, we were able to narrow down the causes of Fondu Fyre spew.

WHAT WOULD YOU SAY YOU GAINED FROM THE EXPERIENCE?
Michael: Professionalism for sure. This is the first professional job I’ve really had. I got a lot of experience, got to see many presentations. Generally, when something exciting was going on, we got to take breaks to attend these events. For example, my supervisor thought it would be cool for me to see the presentation on the Columbia disaster, so I got the chance to learn more about that.

Taylor: I’d definitely have to agree with professionalism. This was my first professional environment. I was also able to network greatly and look at other aspects such as bureaucracy. You don’t really have a “job” per say… their real goal is to give you an exposure to everything. I had a lot of freedom because of that.

WHAT ADVICE DO YOU HAVE FOR ASPIRING CO-OPs?
Michael: We have all sorts of resources for co-ops here at Georgia Tech. All the NASA’s centers usually have a co-op website. When I was applying, the co-op advisor from Johnson space center was here. Doing things such as researching which center I wanted to be in really helped me. Leadership helped too; I was the president of the robotics team in high school. In high school, I also had an internship with an engineering company for robotics. A good GPA also helps, though this isn’t the most important thing. They’re really looking for diverse engineers. Getting a co-op is a really good idea… at NASA, employees are primarily chosen from students who have co-oped earlier.

Taylor: Keep your GPA up and get experience around campus. I asked my supervisor why I was chosen. I’m in a fraternity, so I’ve really been able to get executive positions in my frat like that. They want smart engineers, but the problem is that everyone is smart. Because of this, they’re looking for a new grade of experience. Leadership and volunteering really help. It was my leadership experience which really helped me.

As the semester progresses, students will still be searching for that killer co-op or internship. Keep up the search, and don’t give up! Co-oping can give you a strong competitive edge whether you’re applying for a job or you’re applying to graduate school. After all, little can beat solid experience in the work force.

What are you waiting for? Don’t stay co-oped in your room this summer… go and co-op with a company!
Last semester, Grant Schindler, a PhD student in Frank Dellaert’s group in the Robotics and Intelligent Machines Center, travelled to Korea to present his research and Japan to attend a conference in the field of computer vision. Here’s what he had to say about his travels.

WHAT PROJECT LED TO YOUR TRIP?
I’m doing computer vision research on the 4D Cities project, which involves reconstructing 3D models of cities from historical photos. The key is that these 3D models change over time as cities are built up, and a user can then explore both the photographs and the 3D city models as they change over time.

WHY DID YOU END UP GOING TO SOUTH KOREA?
Samsung is sponsoring the development of a 4D Cities platform so that anyone can build a 4D City model like the one we have already built for Atlanta (http://4d-cities.cc.gatech.edu/atlanta). Their research center is based in Suwon, South Korea, so I traveled there to begin our collaboration by showing them our current software and giving a talk on my previous research. This collaboration came about through Georgia Tech’s STAR center (www.star.cc.gatech.edu).

WHERE IN THE COUNTRY DID YOU TRAVEL?
In Korea, I spent my time in Suwon near Samsung’s research facility. I flew next to Tokyo, met up with a colleague, and took the Shinkansen bullet train to Kyoto for a conference. On the way back from Japan, I spent one night in Seoul before flying home to Atlanta. All told, the trip took almost 2 weeks.

DID YOU HAVE ANY INTERESTING CROSS-CULTURAL ENCOUNTERS?
My hosts at Samsung took me out for a wonderful Korean dinner at a traditional restaurant in the countryside. The food was wonderful, lots of interesting flavors and textures -- and we got to sit on the floor.
AFTER KOREA, YOU WENT TO JAPAN FOR A CONFERENCE. COULD YOU DESCRIBE THAT A BIT?

ICCV is the International Conference on Computer Vision, which is held every two years in a different country. It’s the top computer vision conference, and there’s always exciting research presented.

DID YOU PRESENT ANYTHING, OR WERE YOU JUST ATTENDING AS A SPECTATOR?

I presented a poster at a workshop -- workshops are small mini-conferences on more specialized computer vision topics that occur before or after the main conference. This was work primarily by Mingxuan Sun on how to create a consistent set of 3D building textures from historical photos that vary widely in appearance and lighting.

WHAT WAS THE MOST INTERESTING PROJECT YOU SAW AT THE CONFERENCE?

There was a lot of great research on display, but in particular, there were several really nice projects out of the University of Washington -- one called “Building Rome in a Day” involves fast automatic 3D reconstructions of cities from user-submitted and tagged Flickr images. Another was “Reconstructing Building Interiors from Images” which performs a similar task for indoor environments. The results from both of these projects are visually impressive.

IS THERE ANYTHING ELSE YOU’D LIKE TO TALK ABOUT IN JAPAN?

Tokyo was interesting from a cultural perspective. The Akihabara electronics district is a must-see in Tokyo for any CS major, and especially for video game enthusiasts. Kyoto has beautiful historical sites, old wooden temples, and palaces. My favorite was Sanjusangendo, a Buddhist temple with 1000 golden statues protected by some amazing 800-year-old guardian deity statues that look almost like modern anime characters. The free-roaming urban deer in the city of Nara were also quite an interesting sight.
A SCAR ON THE FACE OF THE EARTH
OPERATION ASHA HELPS WITH TUBERCULOSIS IN INDIA

BY SONALI BATRA

“Tuberculosis is a scar on the face of the earth”, says Dr. Shelly Batra, a leading gynecologist in New Delhi, India and the President of Operation Asha - a 501c3 non-profit organization aiming to eradicate tuberculosis from the world.

And a deep scar it is indeed. Every minute, a patient dies of tuberculosis in India. This disease poses medical problems, but poses even more social and economic problems. Lower class Indian societies perceive tuberculosis as disgraceful. Married women are banished from their homes only to be left to live on the streets, where they eventually die of starvation. Many children who have contracted the disease are expelled from their schools. Millions of dollars are lost every year because tuberculosis renders a sizable percentage of the work force unproductive.

It may come as a surprise that tuberculosis is a treatable disease. If this is so, why is it that tuberculosis has not yet been eradicated? The answer lies in the fact that it is a poor man’s disease. Not much attention is paid to the realm of the poor, since many believe that tuberculosis doesn’t affect the general population. This is quite contrary to the truth, as tuberculosis is highly contagious. On average, someone infected with tuberculosis spreads the disease to twelve other people by coughing. While the poorer social classes tend to be afflicted with tuberculosis, it is easy for a lower class worker to come into contact with a higher class worker, propagating the disease through the ranks of society.

Even though the Indian government provides free treatments for tuberculosis, the government centers where drugs are distributed are not readily accessible to patients. In addition, associated opportunity costs for receiving the treatments are especially high among poorer classes. Since most government operated centers are open from 10 am to 1 pm, a patient needs to miss work in order to get treated. After several thoughts about unemployment, many patients choose not to go for this reason. Many who decide to receive treatment...
stop their course of medicine immediately after they feel better. Missing doses results in MDR (Multi Drug Resistance), which leads to XDR (External Drug Resistance), which is fatal.

Enter Operation ASHA: this organization connects the last mile of the cable by making tuberculosis treatments readily available to poorer classes. The Operation ASHA centers are situated in various communities and make use of preexisting buildings such as places of worship and popular shops. Each center has a treatment provider, who dispenses the tuberculosis medicine under direct supervision. Operation ASHA employs counselors, who belong to the community they serve. Counselors help patients in getting tested by a sputum test, and provide supervised treatment once diagnosed. Counselors educate the patient and his family about the disease and explain the consequences of missing doses. Operation ASHA has been highly successful in eliminating the problem of missed doses.

This entire procedure is provided for an amazingly low cost of only $15 per patient. In comparison, other non-governmental organizations spend over $350 per patient. Eighty percent of the funding Operation ASHA receives goes to the salaries of the counselors and drug distributors and twenty percent is devoted to administration and fund raising.

What is even more remarkable is that each Operation ASHA center becomes completely self sufficient after 2 years. This is because the Indian government gives a grant of $15 per successfully treated patient. The funding it receives can go toward opening new centers and treating more patients.

Please make a donation at www.opasha.org. Treat a poor tuberculosis patient for only 8 cents per day!
GLOBAL GAME JAM

JAM OUT A GAME IN 48 HOURS

BY JEANIE CHOI

How would it feel to create and share my own game is a thought that slips through the CoC student’s brain frequently. To take a brilliant idea, make it real and watch people interact with your creation. But for the aspiring gamemaker it takes more than just inspiration to get things going. A lack of time, a noobish level of know-how in sound/graphics/programming, a perfectionist’s desire to make this the Best Game Ever and a lack of any kind of time constraint can quickly deflate plans. For those looking for an excuse to set aside time exclusively for creating that game, a relatively new annual event is worth looking into.

The Global Game Jam is a relatively new event where students from around the world team up with other game-aficionados and crank out a game during a 48-hour timespan. Interested students sign up and register according to their respective school, while listing the skills they have to offer. The event usually takes place during the last weekend of January.

That fateful Friday the students are then greeted and treated to an inspirational keynote to hype up the mood and provide inspiration. Last year the introductory inspirational video starred creator of World of Goo Kyle Gabler and showcased various projects created during similar time crunches as this. Students then form into teams based on skill sets and interests, and a common constraint and theme for the event is announced: last year’s archaic theme required each team to address the pros and cons of relationships. Cue a large number of friendship and magnetism themed games.

For the next 48 hours the area is abuzz with productive creativity. The event ends Sunday with each team uploading and presenting their creation. Participants could then see how others responded to the theme and constraints across the globe. The event’s very first (and very successful) run took place last year, and this Friday its second run will take place.
The event is well-organized and the large-scale nature of the event makes it an excellent source of exposure. The mass of creative work by students passionate enough to give up their weekend from all around the world attracts many potential employers as well as good media attention. The event pulls together many talented, aspiring game-lovers together in a single time frame to meet and collaborate together in possibly creating the next inspired game that has the world’s attention.

GLOBAL GAME JAM 2009

WHEN: JANUARY 29-31

WHERE: SCAD ATLANTA 1600 PEACHTREE ROAD NORTHWEST
What do you get when you cram four friends, 3 laptops, and way too much soda in a room in the College of Computing Building for twelve hours? Normally you’d probably end up with something resembling one of the Saw movies, but if Microsoft has any say in it, you’ll emerge with 40 (hopefully) solved puzzles.

Last fall, Microsoft came to campus to host its annual Microsoft College Puzzle Challenge, a competition in which teams of college students across the country race to solve as many puzzles as possible. Hosted by on-site Microsoft employees and judged by employees at Microsoft headquarters in Redmond, WA, the event lasted from 12pm to 12am, Atlanta time.

Each team was given a room, provisions, and craft supplies and told that it had 12 hours in which to solve the elusive Meta Puzzle. Before they could even attempt this goal, though, teams had to solve as many smaller puzzles as possible.

While it was technically possible to win the competition by only solving this one super-puzzle, it was realistically impossible to solve without solving the majority of the others, since each puzzle unlocked more clues necessary to solving the final puzzle. Of the 50 teams to solve the final puzzle, all correctly solved at least 30 of the 36 other questions, with most teams scoring more than that. The smaller puzzles—which were all written by Microsoft employees, with a few even written by some of the company’s Georgia Tech grads—ran the gamut of logical twists, number games, programming problems, trivia, and even a bit of arts and crafts.

While some were straightforward (like translating a series of numbers into T9 and decoding their meaning) other puzzles were so obtuse that they didn’t even pose a question at first glance.

One question, entitled “No Brains Required,” simply gave participants five sets of movie facts. The solution? Identifying that the movies identified by each set shared a common actor. Once the actor is discovered, contestants had
to realize that they all of the actors had played Batman at one point or another. By ciphering through the letters of the actors names, the word “Crane” bubbles to the top and, combined with the nod to The Wizard of Oz in the puzzle’s title, the questions answer, “Scarecrow,” is revealed.

Other particularly interesting puzzles included a two-dimensional version of the popular game Portal, building a paper model of a studio set and reading the message that appears when it’s viewed from above, and even a trap set by Admiral Ackbar.

Some puzzles took a more meta-game approach. One of these involved repeated messages forbidding participants from attempting to bribe the challenge’s overseers. While these messages were being sent out, one puzzle, entitled “Do as You’re Told” disguised itself as sheet of instructions. When made an offer in exchange for information, the staff would provide the answer to the puzzle.

The first team to solve the puzzle was Princeton’s Left for Dead which finished the challenge several hours in advance having solved all but one of the puzzles. Tech’s top team, The Hive, ranked in at number 77 having solved 34 of the 36 questions, but not the Meta Puzzle.

The grand prize included an Xbox 360 Elite and Zune HD for each team member. First, second, and third place winners at each location were given a choice from a variety of video games and software (including free copies of Windows 7 Ultimate Edition). Honorable mentions (also awarded with prizes) were given for a variety of distinctions, such as answering the most questions incorrectly or posing the funniest question.

The Microsoft College Puzzle Challenge is an annual event that will be held again in the fall. Spots fill up quickly, so if you are interested, be on the lookout for what may be one of the most awesome ways to spend a Saturday.