Dear ISE family members and fans,

Another school year is coming to a close and that means another semester of exciting news, events, awards, and fascinating individuals shaping the Grado Department of ISE. Enclosed you will read about students utilizing their ISE skills and tools to aid the community, students working together to put on one of the greatest fundraisers for Relay For Life, and some of the outstanding student and faculty members of the ISE department. You will also read about the Virginia Tech IIE Chapter’s journey to Raleigh, North Carolina for this year’s Regional IIE Conference and all of the activities which took place. Finally, you will find a recap on where seniors are going next year and how successful Virginia Tech ISE students have been when it comes to finding employment upon graduation. It is our goal to continue to provide you with all that is ISE, and it is our hope that you provide feedback and creative ideas on how to improve this Newsletter. Please, do not hesitate to contact Joyce Vest [vestjs@vt.edu] with your comments. We hope you enjoy the issue and look forward to hearing from you. Stay tuned for our next edition coming soon.

Sincerely,
Your ISE Editors

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**Featured Article**

**St. Patrick’s Day… Relay Style**

On Saturday March 17th the ISE department, in collaboration with RHF, CAAPC, and Relay for Life, hosted the second annual Relay Royale. Students and faculty alike came out to try their luck at the casino tables playing their favorite games like Black Jack, Texas Hold’em, and five card draw. Owens banquet hall was transformed into a scene from the 007 movie Casino Royale. The high class environment was set with delectable catered food, dimmed and colored lights, decorations, and a live jazz band setting the mood of a classic casino. Students dusted off their tuxedos and cocktail dresses to look their best for when they win big. This all helped make Relay Royale a night to remember.

Upon entering, players received a cup of chips which they could get refilled three times. The chips could then be traded in for raffle tickets to enter for a chance to win great prizes including gift cards to various restaurants, an iPod touch, and a football signed by Frank Beamer. Admission was free to everyone with donations to Relay for Life highly encouraged. Combined we were able to raise almost $1,400 for the Torgy’s ISE Relay for Life team who as many of you know raise money for cancer research in honor of cancer survivor and former President, Dean, and ISE Department Head Dr. Paul Torgersen.

It wasn’t just students that came out to help royally flush out cancer. Several ISE faculty members came out to show their support for our department. We were honored to host Dr. Torgersen and his daughter, who both tried their hand at blackjack. Department head Dr. Don Taylor and associate department head Dr. Van Aken both came out and brought faculty members with them to join in on the festivities. Dr. Wernz brought his best poker face and won big at Texas Hold’em. Also in attendance and looking classy as always were Dr. Kleiner and our very own Joyce and Will Vest. Overall, more than 200 people attended keeping the Owens banquet hall notably full.

The night was a grand success with everyone having a good time while raising money for a great cause. A special thanks goes out to everyone who offered their time to help plan and run this event. ISE students came together to make this event possible and at the same time showed the university why ISE is one of the strongest communities at Virginia Tech. Without the help of our students forming the planning committees as well as dealers, Relay Royale would not have been possible.

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Colton Wenger
“Choosing ISE was a very rewarding decision, which resulted in many great opportunities to develop both academically and socially.”

Greg Dokuchitz
ISE Senior

Student Spotlight: Joe McDaniel

Joe McDaniel has been noticed for his dedication to the ISE community. He has been attending Virginia Tech since 2003, taking two credits a semester while maintaining a full time job at the Uttermost Company in Rocky Mount, VA for the past 16 years.

Joe received his Associates in Engineering from Virginia Western where he maintained over a 3.0 GPA. This gave him the eligibility to enter Virginia Tech’s engineering program, where he chose Industrial Engineering because it directly applied to his work at Uttermost. Joe is very passionate about this program and enjoys meeting new students each semester. He describes ISE as having a sense of comfort and pride associated with it and states it holds true each year.

Getting Involved With Bike Kitchen

It’s always exciting when we get to apply our ISE skills we learn in class to real world problems. And that’s just what a group of about 30 ISE students got to do. A local community organization, Bike Kitchen, has asked ISE students, led by the ISE Ambassadors, to assist them in a few very important ISE related projects including creating a database and redesigning their facility layout.

Bike Kitchen is a new organization in Christiansburg that collects bike parts, assembles them, and distributes the refurbished bikes to people in the local community. Before any collection or assembly can take place, the organization needs solutions to several logistics and other ISE challenges. How will they keep track of bike parts? How will they know when they have enough parts to make a whole bike? How many work stations do they need? How many tools do they need and where should they be stored in relation to the assemblers? These questions fit perfectly into the ISE skillset.

For the rest of the spring and continuing into the fall semester, ISE students will be working with Bike Kitchen on the following four projects:

• Creating a database to keep track of inventory of bike parts, taking into account the various sizes and types of bikes.
• Creating a database to keep track of which families received bikes from the organization.
• Redesigning the layout that will best utilize the limited space for storage and workstations.
• Creating easy-to-read bike assembly manuals, both a written copy and a series of videos for volunteers.

Volunteering in the ISE department is very important to its students, especially when they have the opportunity to give back to the local community. However, with this particular project not only is the Bike Kitchen benefiting, but it also gives Virginia Tech ISE students the opportunity to apply their ISE skills on real-world problems and gain valuable experience which they can apply in jobs, internships, or discuss in interviews.

Ways to Stay Connected

If you and members of your graduating class or your employer would like to sponsor or be a co-sponsor of an event (e.g., ISEats, pizza for information sessions, Relay for Life fundraising events) contact us and we will coordinate your efforts!

THE ISE CONNECTION

Danielle DeRosa
Sixteen ISE students traveled to Raleigh, NC on February 23rd-25th for the IIE Regional Student Conference at NC State. The conference started Friday night with a mingling social at a local Irish bar downtown where students from the different universities could get acquainted. All day Saturday and Sunday morning was devoted to the conference.

One of the presenters that spoke on Saturday talked about the idea of always being an industrial engineer. The message was that even though you may go on to different industries or only indirectly use your IE tools, it will always be your background. Be proud of this identity!

Two professionals from Premier Healthcare, Joe Pleasant and Tangela Craft, spoke on the involvement and importance of IEs in the healthcare field – their roles in the consulting company, how they help at Premier, and where the field is headed in the short-and-long term future. They stressed the fact that the government is starting to reimburse hospitals based on the quality and efficiency of their care, not how fast turnover is or how many times patients return. The emphasis is now on saving money while providing better, more effective healthcare. Joe and Tangela stressed that this is where IEs can really make a difference.

Students also participated in a panel with four young IE professionals – one each from a hospital, Manhattan Associates (consulting), GE, and Mitre. Students had the opportunity to mingle with the professionals later in the afternoon. The remainder of the day was filled with speakers that continued to highlight the breadth of IE applications, including supply chain logistics and IE applications in biomanufacturing.

Elena Page, the keynote speaker on Saturday, stood out with her contagious enthusiasm and genuine passion for her work. She gave a brief account of how she entered a rollercoaster design contest on a whim just because it interested her, landed an internship with Disney, and then a full time job there. At Disney, she continued to follow her curiosity and, along with other employees who did the same, found herself riding coasters around the world and developing new rides – work that she absolutely loved. Elena eventually left Disney to pursue her other interests – in sports, for example. She is now working to develop sports-related cartoons for national broadcasts of large sporting events. She left everyone in the room hungry to pursue their passions just as she did and gave a few important suggestions for staying on track:

- Set goals for yourself and meet them: daily, weekly, or monthly. Work on something that inspires you (e.g., a design portfolio) and set regular dates to show your progress to someone.
- Think smart. Stand out. What can you do that’s different?
- Follow what interests you most because if you find work there, you will love it.

The conference ended Sunday with a few additional speakers and student paper presentations. Two Virginia Tech students, Andrea Shome and Pedro Graber, presented their undergraduate research, along with four other students from different universities. Andrea received third place in the paper competition.

All in all, the conference was a great learning experience for all students involved. NC State wrapped up the conference with a parting e-mail that all participants received a few days later. They left us with the following questions, which we now pose to you:

- How will you define yourself? Through your work or your passion?
- How will you solve a problem? What ways can you redefine your mindset for a fresh perspective?
- How will you engineer inspiration? What will you surround yourself with to empower a culture of innovation?
Lee Wells is a PHD candidate and Graduate Research Assistant in the ISE department, who’s been recognized for his assistance to students within ISE.

Lee graduated with both a bachelors and masters from Michigan Technological University in Mechanical Engineering. His research interests are physical modeling of assembly processes for on-line part-by-part compensation and Statistical Process Control for high-dimension multi-modal data sources. In his free time he enjoys hunting, fishing, and archery. Lee is excited to announce that he will become a new father in June!

Dane Harrington, a junior in Industrial and Systems Engineering, has taken the idea of being well-rounded to a level unheard of by most. As a featured columnist for the Collegiate Times, Dane defies the “engineers-can’t-write” mindset with his weekly articles in the column entitled, “He Said, She Said”. In the popular column, he portrays the male perspective on a variety of often comical topics relevant to college students which is then countered by a female perspective. In an equally public setting, Dane performs as a Low Tech for the Student Alumni Associates and previously served as a Hokie Camp Counselor. Through these efforts, Dane has energized many underclass Hokies to the devoted school spirit that every current student and alumus knows and enjoys so much.

Dane also involves himself with a number of organizations on campus including the Class of 2013 Leadership Team, his fraternity, Delta Sigma Phi, and the Consulting Club at Virginia Tech. As the Aesthetics Director for the Class of 2013 Leadership Team, Dane and his committee designed and organized the atmosphere for 2012 Ring Dance. This dance is a portion of the Class Ring tradition at Virginia Tech and is storied and remembered for its extravagance and ambience year after year. Through Delta Sigma Phi, Dane has continued to show initiative and leadership by taking on the Fraternity’s annual fundraiser as the Internal Philanthropy Chair. The event recently concluded and raised more than $27,000 for the American Red Cross-a fraternity record and a testament to Dane’s hard work. Finally, as an analyst in the Consulting Club, Dane has had the opportunity to work on real-life projects for companies around the New River Valley. During these projects, Dane utilizes his ISE skills gained from both his classes and internship experience at JLG Industries.

Within the ISE department, Dane continues to impact others as a mentor for freshman engineering students and a review session leader for Theoretical Statistics where he helps to promote the major and teaches younger students the keys to success. It is always special having someone like Dane as part of our ISE community.

Congratulations Spring 2012 APM Initiates!

Arris R. Bahrami
Jonathon D. Burgess
Kenneth H. Fung
Thomas J. Gavin
Arka A. Ghosh
James C. Hebeler
Stephanie T. Kopelic
Emily L. Layne
Andrew W. Pinto
Smiling Faces at Relay Royal...

Tom Bannister and Ravi Gangele show their excitement after putting together a special night

Stephanie Kopelic looks to be making a killing at the blackjack table

Shawn Bittinger surprised by how lucky some people can get

Joyce Vest giving some needed assistance to Cory Sandras wardrobe

A special thanks goes out to all of the people that made this event possible!

Colton Wenger and his fiancé Alecia Hess smile for the camera

Dominic Breuer places the River down and is shocked by what he sees
Many people believe that it is an extremely difficult time to find employment given the state of the US economy. However, ask a Virginia Tech ISE senior and they would beg to differ. A recent survey about job employment was sent out to the ISE senior class and the results show extreme success when it comes to the job hunt. Of the 73 respondents, 63 students were seeking employment upon graduation. The remaining students were either taking a year off or attending graduate school in the fall. Of the 63 students seeking employment, 76% had accepted a full time position. How could this be, given the difficulties of so many other students seeking employment in other areas of study? When asked if the students found their jobs on their own or using resources provided by Virginia Tech, including Hokies4Hire, Career Services, emails from Joyce Vest, etc., 73% of the students had said they did use resources provided by the university. A breakdown of the type of employment can be found in the figure below as well as the range of salaries. As shown, the most popular category of employment was consulting, consuming 39% of the recent graduates. In addition, it can be concluded that the average salary range for employment was between $60,000 to $62,499. Finally, of all the places to receive employment, Virginia contained the most jobs with 52% of students beginning their careers in the “Old Dominion State”. Students have been hired by companies such as Deloitte, Accenture, Manhattan Associates, and CapTech Ventures for careers in consulting; PepsiCo, Danaher, and General Electric for careers in manufacturing; as well as other companies such as the US Army, US Navy, Bechtel, Verizon and so many more. So, it is no surprise students are having success. Given the talented students here at Virginia Tech and the prestigious reputation of the ISE department, students continue to seek and receive employment.

When I was at Virginia Tech...

| LASIOMUTNI | CAYTIIFL NINLGAOP | ESNORTIAF REHSEARC |
| REBEIEINNE CNMAYOYO | SENRIO NEDG15 | NUFAAMNUT16C |
| TISSIATTCS | LLBAGG USSSIEI | GBMEORSNC |
| NAMUH POSCATR |

Unscramble each of the clue words. Take the letters that appear in boxes and unscramble them for the final message.
Creating a Culture of Giving

At the Grado Department of Industrial and Systems Engineering, our vision is to be leaders in research, education, professional outreach, and leaders in our communities and society. Funds from the Commonwealth of Virginia to Virginia Tech do not cover our annual budget or needs. Private giving is critical if we are to maintain, let alone improve, the high quality of our processes. Giving to ISE at Virginia Tech can provide student scholarships, maximize students’ learning, help us attract and retain the world’s best faculty, assist with day-to-day operations, and help maintain state-of-the-art research and teaching facilities. If we are to be competitive with other top 10 departments, giving is vital.

To aid us in soliciting funds for this endowment, we recently commissioned a "Hokie Bird" sculpture, which has been installed on the wall in Durham Hall right outside the departmental office suite. The names of our Benefactors appear prominently on the large brass plaques above the Hokie Bird and the names of our Patrons appear on the brass plaques on either side of the sculpture. Our Sponsors appear on the bronze plaques surrounding the Hokie Bird.

For more information on donating to the Hokie Bird fund, visit http://www.ise.vt.edu/support/vitalgiving.php

Our Most Vital Need - The Hokie Bird Project.

A Special Thanks And Recognition To Our Hokie Bird Excellence Fund Contributors

Adams, Michael & Brenda
Arnold, Dick & Sally
Arnold, Joseph
Askew, Tom
Bailey, Fred
Birk, Lydia
Blanchard, Ben & Dot
Canada, John & Wanda
Casali, John
Chachra, Vinod & Ranjana
Cullinane, Thomas & Katherine
Davis, Darrell & Michelle
Deisenroth, Mike & Marilia
Dick, Dan & Lynn
Doughty, Gary & Eleanor
Easterly, Mary Chris
Fitzgerald, William & Vicki
Forbes, Charles & Patricia
Grado, John & Corrie
Guynn, Jack & Becky
Hepler, Clint & Nita
Jones, John & Lillian
Klein, Dave & Christine
Laman, Denise
Leclaire, Kevin & Jessica Oi
Leslie, Charles
Mayo, Trevor
Memmer, Peter
Miller, Matthew & Holly
Monroe, Ellis
Montague, John & Jean
Montgomery, Doug & Cheryl
Norris, Jack
O’Brien, Charley & Betsy
Pannell, Rob
Polk, John & Marty
Ring, Bill & Sara
Rusak, Jennifer & Mark
Sage, Don & Mary Etta
Sauer, Nancy & Ron
Smith, Jaime & Erika
Smith, Michael & Elizabeth
Snelling, Steve
Stewart, Mona & Kevin
Szabos, Brian & Kurstein
Taylor, Bob & Connie
Taylor, Don & Jo Ellen
Torgersen, Paul & Dot
Van Aken, Eileen & Steve
van Luyn, Dutch & Trudy
Worley, Hal & Thornie
WE WOULD LOVE TO HEAR FROM YOU!

Please send in any updates and announcements such as (but not limited to) marriages, births, career accomplishments, retirement, community projects, and awards and recognitions by email to Joyce Vest at vestjs@vt.edu or by mail to the department, address listed below.

Please be sure to include all relevant information with your name, address, phone number, and email address.

Mailing and email address updates should also be sent to Joyce Vest at vestjs@vt.edu.