Engineering and Sports are not mutually exclusive activities

UF | UNIVERSITY of FLORIDA

CHAIRMAN'S COLUMN

Dear Alumni and Friends,

It is fall and football is in the air – of course, that comes with the territory when your office is directly across from the Swamp! In the spirit of fall and football, we decided to take stock of our involvement in sports as a Department – whether students, alumni or even faculty research. You may be amazed at the stories we found – from the Olympics to the Superbowl to the PGA Tour, our students and alumni have participated in, as well as contributed to, a wide range of sports. For those of us that prefer to observe, we also have perspectives from the bleachers (namely a member of the Gator Marching Band and Professor Emeritus James Burns, who rarely misses a Gator men's basketball game).

Of course, these are not just games to play – academics have been studying sports for years. For example, the *Journal of Quantitative Analysis in Sports* has been published by the American Statistical Association since 2005. The Institute for Operations Research and the Management Sciences has a section on Operations Research in Sports. Distinguished Professor of Industrial and Systems Engineering, Panos Pardalos, has edited two volumes on the subject. This should not be surprising, given the tremendous interest humanity has in sports as well as the impact sports has on our economy. From an engineering perspective, the availability of data for analysis is almost too tempting to ignore.

We have three very different perspectives on sports research in this issue. Dr. J. Cole Smith examines scheduling aspects; Dr. Pardalos examines team and league structures with network analysis; and Dr. Donald Hearn provides guidance on forming "fair" teams when pairing golfers in competition. Between our research, students, and alumni, we discuss baseball, basketball, boxing, football, fishing, golf, swimming and even badminton, in this issue. So read on and enjoy!

Sports are surely a way to bring our alumni together. That was evident during the LSU game weekend, as 11 of our young alumni came together and initiated the Young Alumni Advisory Board. The mission of this new board is to foster young alumni participation in Department activities. It will also provide mechanisms to help in the professional development of our young alumni. As reported last summer, the Board was conceived by alumni Kathryn Blackwell (BS ISE 2009), Jessica Hinkle (BS ISE 2009), Natalie Keller (BS ISE 2010) and Guillermo Moratorio (BS ISE 2008). The final structure has four working committees:

Engagement will enlist the time and knowledge of our young alumni to connect ISE students with industry.
Feedback will provide insightful feedback to the department regarding the professional preparation of students.
Pipeline will create a formalized young alumni relationship management program.
Support will initiate and maintain financial development plans to enable lifetime giving by ISE alumni.

Liz Krall (BS ISE 2012) will initially lead the Engagement committee; Scott Hall (BS ISE 2009) the Feedback committee; Keller the Pipeline committee; and Alex Brown (BS ISE 2011) the Support committee. Moratorio will serve as the Board's first President while Blackwell will be the first Executive Vice President.

Hinkle, Frank Kraemer (BS ISE 2009, MS ISE 2009), Jo Smith (BS ISE 2009), Diego Soto (BS ISE 2010), and Andrew Vittetoe (BS ISE 2012) round out the initial Board's membership. I want to thank all these alumni for their continued support of the Department and urge other young alumni to reach out and help in their efforts (all are welcome!). If you are interested in the getting involved with the group, send an email to YAABGator@gmail.com.

Finally, keeping with our sports theme, I hope many of you made it to the reunion weekend for the South Carolina game. We will report on those weekend activities, which include our Hall of Fame alumni Linda Hudson and Glenn Renwick participating in the Leadership Symposium, next issue.

As always, please share your stories with us (352-392-1464, hartman@ise.ufl.edu). We are making a concerted effort to find all of our alumni, so please help in our effort. (Our ISE Ambassadors have named this the year of the ISE Census!) You can provide your updated information via a form on our website (www.ise.ufl.edu/census) or join our LinkedIn (www.linkedin.com) group "UF Industrial & Systems Engineering Alumni." We look forward to hearing from you!

GO GATORS!

Sincerely,

Joseph C. Hartman
Professor and Chair

My View from the Bleachers

Brittany Morgan

It's 8 AM on a Saturday in Gainesville. In a few short hours the streets across campus will be covered in orange and blue tents, the smell of burgers and hotdogs will fill the air, and arms of fans will be "chomping" every time they pass a fan of the opponent. But at this time, campus feels like a ghost town. That is, until you hear the familiar sound that makes you jump to your feet and yell "Go Gators!" That's the sound of the Gator Nation, the Pride of the Sunshine marching band beginning their game day rehearsal.

I have played the saxophone in the Pride of the Sunshine marching band at the University of Florida for 4 years. I had the opportunity to cheer on some of the best college football players during those years and was able to make history with the team when they won the 2008 BCS National Championship game in Miami (keep in mind this was my freshman year so I expected these things to happen every year). I also had the opportunity to travel each year with the band to select away games and have supported the team at the SEC Championship game twice (one year with a better outcome than the other). And each year we were fortunate enough to close out the season with a bowl game.

Every year, the band members participate in a week-long band camp right before classes start to prepare for the season. This is a week of rehearsal, both inside and outside (just think of the Florida heat), from 8 AM to 9 PM. During these days, we learn how to properly take our "first step" and how to make the designs on the field actually look like what they are supposed to be instead of just some squiggly lines. And of course, we rehearse "Orange and Blue" and "We Are the Boys" so many times that we can play them in our sleep. At the end of this week, we are all exhausted, have intense farmer's tans, and still have yet to order our textbooks for our classes that start the next day. But all of these things are forgotten when we step onto Florida Field for the first time during the opening game of the season.

Many fans can say that they've been to Ben Hill Griffin Stadium, maybe even sat close enough to the field they could feel the players sweat; however, not many fans can say they've performed on the field for over 90,000 fans. The feeling is remarkable! Hearing the fans yell "Go Gators!" at the top of their lungs while you're playing your school's fight song is the epitome of school spirit. You quickly forget how hot you are in your heavy uniform and feed off the energy of the crowd.

Coming into college, I wasn't sure if I would be able to participate in the marching band due to the large time commitment. I participated in marching band in high school and knew first-hand how much time was required for rehearsal. I didn't know if I'd be able to balance the heavy work load of my engineering courses with something that required so much time outside of class. I decided to give it a try, at least for a year. That's been one of the best decisions I've made in college.

Currently, I am a fifth-year industrial and systems engineering student and will be graduating with honors in December this year. I was able to excel in my studies while being part of one of the most recognizable organizations on campus, not to mention one of the largest (about 330 members). I was also able to be involved in other organizations on campus, including Institute of Industrial Engineers, Alpha Pi Mu, and the NaviGators International Program.

I chose to major in Industrial and Systems Engineering after participating in the Engineering Freshmen Transition Program. I remember learning about Industrial and Systems Engineering in the Intro to Engineering class and realizing the endless opportunities available to me with this degree. I currently teach the Intro to Engineering class with fellow Industrial and Systems Engineering Ambassadors with the hopes of educating other students about the degree and our great department.

After graduation, I will be joining the workforce with plans to return to UF for graduate school in the future. As for my music career, I plan on teaching young students how to play the saxophone and instilling in them the same love of music that I have. Without all the support from my band directors, private lessons teachers, and, most importantly, my parents, I would have never had many of these great experiences.

This past summer I had the opportunity to travel overseas to London with the marching band to perform at the 2012 Summer Olympics. We performed at Victoria Park for the Opening Ceremony, in front of Buckingham Palace for the Women's Cycling Medal Ceremony, and at the Royal Guards' Headquarters. We also performed at First Lady Michelle Obama's "Let's Move!" event where several Olympic athletes spoke, including David Beckham, Apolo Ohno, and Nastia Liukin. We were able to do a lot of sightseeing during our visit, including Big Ben, the London Eye, St. Paul's Cathedral, Westminster Abbey, and Stonehenge, and even got to see Queen Elizabeth II drive by twice!

Davelaar & deBorde Balance Swimming with Engineering

Engineering and athleticism require strict self-discipline. While they share this common attribute, being involved in both sports and engineering is a challenge, because of the time commitment required for each. Good friends, Rodion Davelaar and Brad deBorde, each divide their time between ISE and the UF swim team. Each shared his path leading to swimming for UF and becoming ISE's.

Do you know each other well?

Davelaar: Brad and I are very close friends. In swimming there are different training groups with different schedules and we happen to be in the sprint group together, so we see each other a whole lot. When he was making a decision on what engineering major he was going to choose I spent a lot of time trying to recruit him to ISE. And apparently I did a great job, so if swimming and being an engineer doesn't work out for me I can always become a professional recruiter.

deBorde: Rodion and I are very close. I've had the pleasure and honor of training with him for the past 2 years. In that time, Rodi and I have developed a great friendship that I thoroughly appreciate. Rodion is the kind of person who always thinks of others first. He'll gladly walk with you to your classes just to enjoy the conversation. Rodion is also a great mentor and inspiration for me. Pursuing an engineering degree on its own is challenging, but add to that countless hours of athletic commitment and it becomes a definite struggle. Rodion's success in earning good grades and proving himself in the pool has been my foundation in knowing that being an engineering student-athlete is indeed possible. His friendship means the world to me.

How did you get into swimming?

Davelaar: Coming from a small island (Curacao), it is critical to take swimming lessons. When I was six I started taking swimming lessons, and ever since, I have been swimming. In the beginning it was just for fun; around 11 or 12 years old I started doing it more seriously and stopped doing all other sports. At the age of 15, I had to make the decision to come to the US to move to a bigger swimming program. In 2006, I moved to the US to finish my last two years of high school in Jacksonville, FL (The Bolles School).

deBorde: I got into swimming through my brother. One day he tried out for the local swim team. At that time, I also played soccer, football, basketball... the works. My family had all gone to see my older brother try out for the team. I decided to get in the water because I was hot from one of my practices which I'd just come from. Next thing I know, one of the coaches saw me splashing around and asked if I wanted to try out. I thought "Why not" and thus began my swimming career at the age of 7.

I assume you were recruited to swim. How did you choose to become a Gator? Did our engineering program enter into this decision?

Davelaar: During my junior year of high school, the coaches of UF contacted me and I started the recruitment process. I looked at many different schools. When a school contacted me during the process, the first thing I looked at was if they had an engineering school and how broad and good it was. While scoping out UF, I saw they had an amazing engineering program and an equally good swimming program.

deBorde: I hadn't planned on swimming in college until after I won the State Championships my senior year of high school. First thing the next morning, Coach Troy (my head coach) called me and planted the idea about competing at the elite level in my head. I chose to come to UF because it has the best balance of phenomenal academics and athletics in the nation. The renowned reputation and success of UF's Engineering department definitely played a major role in my decision, too. Education is my top priority so it was a huge factor in choosing UF.

How did you choose to study Industrial and Systems Engineering?

Davelaar: When I started college, I knew I wanted to do engineering, but had no idea what type. So I took the Intro to Engineering class. During the Industrial Engineering week of the class, I saw right away that it was different than the other majors. I saw excited students standing in front of the class; it looked like they wanted to be there—not like they were forced to be there, which was unlike most of the other majors where there were professors lecturing about their major. Right after that class I went to my athletic advisor and told him, "That is what I want to do—Industrial and Systems Engineering.

deBorde: In my freshman year, I took an "Intro to Engineering" class. The fantastic presentation about the major's versatility, usefulness in the work force, and the opportunities it presents really spoke volumes with me. This class, as well as several UF-produced personality/interest surveys led me to ISE. I haven't looked back since! I love this program.

Rodion, what accomplishments have you already achieved in swimming? Which is most important?

During the earlier stage of my swimming career I managed to capture multiple Caribbean and Central American swimming championship titles while representing my country, The Netherlands Antilles. I also had the honor to represent my country at 1 Central American and Caribbean Games, two Pan-American Games, 2 Junior Swimming World Championships and 4 Swimming World Championships. During my college career, I represented UF at two National Championships and also received my All American honors. But my biggest accomplishment would be participating in the 2008 Olympics games. Swimming in the Olympics was unbelievable and the experience was priceless. Even though I didn't medal, I got to be part of possibly the world's biggest celebration. People ask me all the time what it was like but I can't really put it into words, the best description I've gotten so far is "Imagine the world compressed into the size of the Olympics village and in that world every ethnicity is living peacefully and extremely excited together."

Brad, you hold the 50M Florida record. Was this something you expected to happen so early in your career at Florida?

I actually hold the 50 yard (not meters) freestyle school record, which is still surprising to read, even months after I captured it. I never thought I would be anywhere close to any record at UF (a school that is consistently one of the fastest in the NCAA). Despite the countless hours in and out of the water in which I trained and pushed myself, I had no goal-times in mind. At SECs when I first broke the record, I was just trying to contribute as many points as I could for the team. It definitely was unexpected for me to get the record this early in my career, but I am not resting on my laurels because of this. I take part in a sport with an impartial judge of success—time. You have to strive for new goals every day or risk not improving and not contributing to the team. So while I'm grateful to my coaches and teammates for pushing me to the point where I could break the school record, I am already focused on doing bigger and better things for UF.

What are your longer term goals in terms of swimming?

Davelaar: Like any swimming athlete my age we all would like to make it to the next Olympics. On my way to the next Olympics, I am hoping to represent my country in a couple more swimming championships. I still have one more year of college eligibility so I am going to try to make the most out of it.

deBorde: For the long term, I have goals of contributing to an NCAA Team Championship in the next 2 years. As Gators, we are never happy with not winning a National Title, and I believe we have the talent to attain a championship for the Gator Nation before I graduate. Beyond that, I want to leave a sprinting legacy at UF. Even further down the road, I am considering trying to qualify for the 2016 Olympic Games for the US team. My experiences at this summer's Olympic Trials whetted my appetite for more.

How hard is it to be a student athlete and study engineering? What are your biggest challenges? How have you balanced these pursuits?

Davelaar: I wouldn't consider being a student athlete while being an engineering student hard. The only difference between being a student athlete and being a student is I can't stay up after 11 pm and studying. All my life I preferred paying attention in class and going to class over studying. And that helps me by cutting down on a whole lot of studying time. There are many other ISE students who are involved in student organizations and that also takes up time. Those are things I also would like to do but I usually can't due to swimming, so that is a disadvantage. My biggest challenge is wanting to be more part of the ISE community. The University Athletic Association (UAA) also provides many great tutors which was very helpful when I was just starting to take the core engineering classes, especially because I could not make many of the office hours due to practice conflicts. But when I started taking the core ISE classes the UAA usually didn't have tutors for my classes and that is when I learned that working in groups with other ISE students is a lot more helpful.

deBorde: Being a student-athlete is a constant balancing act. Balancing the rigorous demands of daily engineering homework with multiple practices per day is a struggle to say the least. With 9 practices per week, I am nearly always in the water, in the stadium, or in the weightroom. After we workout at 6am, I then go to class for a few hours until afternoon practice at 2pm. After this training, I lumber over to eat dinner with some of my other teammates who are equally drained. After we refuel, it's off to do my homework. Around 12 or 1 am I finally am able to get to bed to recover before waking up at 5 for the next morning's practice. Being able to compete for Gator Nation brings me great pride and there is no comparison to the joy I experience in racing the country's fastest athletes. These feelings, as well as the desire for a successful career post-college are what drive me every morning as I get up for practice and every night as I stay up late studying.

Looking ahead, how will engineering and swimming be a part of your life after graduation? What kind of career do you want and how long do you envision swimming?

Davelaar: As long as I can remember swimming, school, family and friends have played a critical part of my life. So imaging a life without one of them would be hard. One day I hope to return to my lovely home country and find a job there. Before I get to the point where I get to go back to my home, I would like to get some work experience and pursue an MBA degree. At the end of the day, swimming is a whole lot of fun and an important aspect of my life but I can't do it forever and it doesn't pay the bills. This year I am going to have to decide whether I want to keep swimming or go into the professional world internationally. Both those dreams are things I can do while I am young and haven't settled down yet. During my career my country has given me a whole lot of opportunities including traveling the world and meeting amazing people. I hope one day to go back and give back as much as I can. I am not sure yet what type of career I exactly want. That is one of the disadvantages of being a year round athlete; you can't go out and do an internship for a whole summer and see what you like. This past summer I talked to my coaches and finally decided to take an internship this fall at a Container Terminal in the port of Rotterdam in the Netherlands. Doing an internship during the academic year is rare in college athletics. But as a redshirt senior I decided that it was a smart move and I will go back and compete in the spring for UF.

deBorde: The balance of swimming and engineering has made me a master of time management. With very very little free time even during the weekends, I have to maximize my time spent every moment of every day. Throughout the hours of hard training, I've learned a lot about myself, how to deal with stress, how to stay motivated, how to work for goals, etc. These skills, along with the irreplaceable friendships I've made, will remain an integral part of my life after graduation. After I graduate from UF, I plan to go to grad school and earn a Masters or Doctorate in Health Care Administration so that I can one day help manage a hospital. For swimming, I am definitely swimming for the next 2 years (I have 2 years left to compete for UF). After those 2 years, who knows what the future holds? After I'm done competing, I'll definitely stay in shape through swimming. It has molded me into the best shape of my life and promotes an incredibly healthy lifestyle.
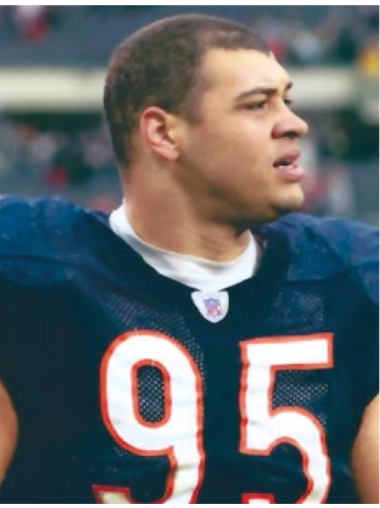
Scott Bucks Trend:
Returns to UF to Complete ISE Degree

The College Sport Research Institute at the University of North Carolina just released its latest "Adjusted Graduation Gap Report," showing that the graduation rates of NCAA Division 1 football players lags behind full-time male students by 17 percentage points. It wasn't easy, but (Josef) Ian Scott did his part to close that gap, returning to Gainesville for the 2011-12 academic year to complete his B.S. in Industrial and Systems Engineering after a six-year National Football League (NFL) career with the Chicago Bears, Philadelphia Eagles and San Diego Chargers.

Scott earned All-Southeastern Conference honors at nose tackle following his sophomore (2001) and junior years (2002). He decided to forgo his senior year and was drafted in the fourth round by the Bears. He played in the Super Bowl following the 2006 season and played in London in 2008 for the Chargers, but his career was cut short by knee injuries that dated back to his college days. "In all, I had five knee surgeries on my left knee," said Scott. "The wear and tear over the years just limited my range of motion."

As an NFL player, Scott continued his studies in the summer – but his course selections were limited, as he only needed core engineering credits to graduate. So when his career ended, it was time to return to Gainesville.

"The most challenging thing about returning was the use of technology," said Scott. "Turning in homework online and using laptops all of the time was something that I had to adjust to quickly."

But the mature, now married, 30-year old father of four, adapted. "I found that I was able to learn more efficiently this time around," said Scott. He jumped right into study groups and group projects without hesitation. "I did enjoy being back at school. I felt like just another member of the student body," he recalled.

Scott also recalled his choice to become a Gator. Although he was the Gainesville High School valedictorian, he was born and raised in South Carolina, so he did not grow up a Gator. He was on his official recruiting visit in 1999 when Florida lost to Florida State. After the game, Scott sat down with other recruits for dinner with the coaches, but Steve Spurrier was in no mood for friendly conversation after the ugly loss. "He told us he was so upset about the way the game worked out that he probably wouldn't be very friendly company that night," recalled Scott. "I knew then that he was a competitor and just wanted to do whatever it took to win, and that was a guy I wanted to play for."

Of course, engineering also played into his choice of college. Scott credits Dr. David Bloomquist, Professor Emeritus of Civil Engineering with introducing him to the idea of an ISE degree with the opportunity to pursue an MBA afterwards. "He introduced me to the perfect blend of math, science and business, which tipped the scales in favor of UF," said Scott.

He attributes his success in the classroom while playing football to the coaching and support staff. "I think the thing that helped the most is that Coach Spurrier and his staff understood the term 'student-athlete' and supported my desire to do well in my classes," said Scott. "Also, the University Athletic Association at UF is one of, if not the, top academic support programs in the country."

Despite the support, fall semesters were tough, as he was required to take 12 credits while playing. "My first fall was not too bad, but the next two became increasingly difficult," he said. He took Materials, C++, Statics, Math Stats 2 and Ethics in his final fall semester.

With graduation, Scott has opened a new chapter in his, and his family's, life. He accepted a job as a Business Analyst at JPMorgan Chase & Co. in Tampa. "I think the biggest thing in the future is that I will always return to the lessons that I've learned in college, both pre and post NFL, and use them to excel in whatever I do," he said. "God has given me the ability to be talented in many areas and I can only go up from here."

Gipson Angling for Future Success

Jake Gipson is a perfect example of the diverse interests held by ISE's all over the world. He grew up in an Air Force family and calls Niceville, FL, his home. Not only does he have a degree in Industrial and Systems Engineering; he is also a champion fisherman and is attending law school.

After an internship and externship at Eglin Air Force base during high school, he chose to study engineering. Through the guidance of his mentors, he picked ISE, which he states is "a really practical approach," and "kept a lot of potential options open down the road," because a degree in ISE requires that students take classes from several other engineering disciplines in addition to the core curriculum.

When asked how he learned to fish, he said, "I grew up fishing; some of my first memories are being out on the lake with my dad and grandfather. I remember from the time I was old enough to hold a rod and reel I loved to go fishing with my dad from sun up to sun down." Before entering college, he only entered one fishing tournament. When Gipson arrived at UF, he used fishing as a way to spend time with his dad, and they entered local tournaments in the Gainesville area. In his second year, a friend came to UF and they began fishing together. They joined a city fishing club, but decided that UF should have a club to compete in college tournaments. Gipson and his friend, Matt Wercinski, founded the Gator Bassmasters.

Gipson says his professors were very understanding of his fishing tournament schedule and would do their best to accommodate them. He feels that winning a National Championship for the Gators also helped people view the Bassmasters as more than just an opportunity for a casual fishing trip.

Gipson has proven himself a champion on several occasions. The Bassmasters' wins for the University include a qualifying event and seven Top 10 finishes, in addition to back-to-back wins in the College Fishing National Championship (2010, Knoxville, TN, and 2011, Murray, KY) and the College Fishing Southeastern Regional Championship (2009 and 2010, in Orlando, FL). Gipson and his father also won the Annual Military Team Bass Tournament in 2008 (Dale Hollow Lake, TN) and 2010 (Lake Eufaula, AL). Gipson said that for the 2008 tournament, he had to delay his flight plans to leave for a study abroad experience. He decided to stay in Alabama for an extra day because he and his father were ahead in the tournament. His professor was understanding of the delay, but said that if he was going to be late, he'd better win.

Gipson is now pursuing a law degree at the University of Alabama in Tuscaloosa. He says that football season is hard, and he misses the fishing opportunities within an hour of the UF campus, but otherwise, "it isn't too bad" in Alabama, where the town is similar to Gainesville and the southern hospitality has helped with the transition. He doesn't know what his future holds with fishing or careers, but he would like to continue with fishing. He would love to qualify for the big tour, but even if he doesn't, he would like to find a way to stay involved in the industry. He is also considering a master's program in engineering that would help him pursue his interest in intellectual property law and litigation.

TPC Sawgrass 17th Hole.

Kelly Swings Career with PGA Tour

A career on the PGA Tour generally requires swinging a golf club. Vernon Kelly (BIE 1962) did it with a shovel.

In 1978, PGA Tour Commissioner Deane Beman was searching the St. Augustine area to locate the first Tournament Players Club (TPC), which would be owned and operated by the Tour, generating revenues through memberships and hosting tournaments. They identified over 400 acres just west of A1A in Ponte Vedra, a property owned by developer Fletcher Properties. Beman agreed to purchase the land (for $1) on one condition: Kelly, a project manager for Fletcher, must come to work for the Tour and develop the site.

Kelly took a two-year sabbatical from Fletcher, and never returned. With a budget of $6.5 million, he secured financing and permitting and supervised construction of the Pete Dye designed TPC Sawgrass and its clubhouse. The course opened in 1981 and Kelly was the General Manager for two years. The Tour also built its home office on-site.

With the success of the TPC (course, property and tournament), the Tour decided to expand and in 1983, Kelly was named President of PGA Tour Golf Course Properties. In this role, which he held through his retirement in 2006, Kelly built 41 courses throughout the world, including China, Japan and Thailand. He worked with a number of famous architects, including Tom Fazio, Jack Nicklaus, Greg Norman, Arnold Palmer, Gary Player, Bobby Weed and Tom Weiskopf.

"Although very little of what I did would be considered traditional engineering, I'm convinced that without the knowledge and confidence I gained in pursuing my degree, I would have had a much different and, in my mind, much less successful career," said Kelly when addressing students during the biannual Gregory Lecture held this past April. He told students that engineering provided the problem solving skills and self confidence to succeed.

His final projects included building the World Golf Hall of Fame in St. Augustine (with two golf courses) and rebuilding the TPC Sawgrass course, including a new 107,000 square-foot clubhouse. The clubhouse, built in the traditional Spanish style of St. Augustine, was constructed in 11 months. The TPC renovation cost $30 million. Kelly was honored when they named the lake in front of the Hall of Fame after him.

It is arguably an unbelievable career given that the son of a mechanical contractor's first two jobs out of school were with his family. Upon graduation, he went to work for his dad, much like he had in his youth, which enabled him to save for college. His father retired his HVAC business in 1968 so Kelly went to work for his father-in-law at JAX Liquors. (He was married as a freshman at UF and had two children upon graduation.) He supervised the construction and maintenance of facilities (outlets and lounges) until his divorce in 1972 led him to seek employment with Fletcher Properties.

His career with the PGA Tour was during a period of unprecedented growth. In 1978, there were 48 tournaments with $10 million in prize money. He started the properties group with two employees -- himself and a secretary. Today, the PGA Tour oversees 100 tournaments on three tours (PGA, Legends and Nationwide, which is now web.com) with over $330 million in prize money. Through 2011, the not-for-profit Tour has donated over $1.7 billion to charity. Kelly retired in 2006 with 2500 employees in the properties group.

While Beman is given due credit for growing the Tour, Kelly's role has also been acknowledged. In the book, *Dean Beman: Golf's Driving Force* (a very interesting read for any fan of golf), author Adam Shapak recounted Beman winning the Tour's Lifetime Achievement Award in May of 2007. At the ceremony, Beman thanked his wife and other employees. But he also "singled out the contributions of two of his most devoted lieutenants, Tim Smith and Vernon Kelly" (p. 360).

"We partnered with a bunch of world class companies," explained Kelly. "A lot of people benefitted, even though the Tour made a lot of money."

Today, Kelly consults for the Tour, but spends a majority of his time entertaining family with his wife Nancy (he remarried in 1978). He admits that at the time the Tour hired him, he did not realize the opportunity. "I'd like to say I did something brilliant," said Kelly with a smile, "but I didn't. I was in the right place at the right time."

A Good Walk Spoiled....Fairly

Don Hearn, Professor Emeritus, and Patrick Siegbahn

It's a weekly endeavor for millions of golfers – meet up with three friends at the course to "have a game." There are many variations that are played, with one of the most popular being fourball (also called 'bestball') match play. In this game (with four golfers), two teams are formed. Each golfer plays his or her own ball and the lowest handicapped score is taken as the team's score. The team with the lowest score wins the hole. A tie results in the hole being halved.

The question is: which teams would lead to a fair match? The answer is dependent on each golfer's handicap. The handicapping system was designed such that two golfers, with different abilities, could play a fair game against each other. A player's handicap designates the number of holes on a particular golf course that a player can take an "extra" stroke to achieve par. That is, a golfer that has a handicap of 4 on a golf course is expected to take an extra stroke (above par) on each of the four hardest holes on the course (each hole on a golf course is ranked in difficulty from 1 to 18). If a golfer has a handicap greater than 18, let's say 22, then they would receive two strokes on the four hardest holes and one stroke on the remaining 14 holes.

The current United States Golfing Association handicap system is based on every player carrying an index. This index is calculated by averaging the 10 best rounds from the most recent 20 rounds played and multiplying by 0.96. This index is then used to calculate the handicap (number of strokes) afforded a golfer on a given course. That is, a golfer may receive different handicap values on different courses due to their level of difficulty, which is measured by a course's slope or rating.

While this method of handicapping works well for two golfers playing against each other in competition, it does not necessarily work well in team competition. That is, higher-handicapped players generally have greater variance in hole-by-hole scores than lower-handicapped players. This means that teams with high-handicapped players could possibly have an advantage and, in the 1970s, the USGA commissioned a number of statistical studies to determine how to modify handicaps for team competitions. However, none of these resulted in any changes to handicaps for the game of fourball.

We decided to look into this problem using optimization theory and statistical analysis and simulations with real data to validate the theory. The results are in the reference below. Here is a summary of what we found:

- Players with high handicaps do often have an advantage in match play.
- Pairing with the right partner is just as important as the variance. To optimize the chance of winning the team spread (difference of handicaps) should be as close to 11 or 29 and as far from 0 or 18 as possible. For example, a team with one scratch (zero handicap) golfer paired with an 11 handicapper would, on average, win fourball matches against a team of two scratch golfers by about two holes. The attempted handicap allowance system by the United States Golfing Association to penalize high handicappers, by discounting their handicap further in team competition, is not an effective way to handle unfairness.
- The Australian tiebreaker rule, where if a hole is tied by the lower scores then the higher scores of the two teams are then considered to determine a possible winner, is a simple way to lower unfairness.

Of course, this all assumes that golfers are playing with an honest handicap….stay away from those sandbaggers and hit'em straight!

For further reading see the reference below. Also, if you have an Android operating system on your phone, you can download a free app named Bestball Matchplay Simulator to compute the odds of any fourball game or to determine the fairest game given the four player handicaps.

Finally, to run the simulation developed by Dr. Donald Hearn and Patrick Siegbahn yourself, visit siegbahn.com/golf.

Reference

P. Siegbahn and D. Hearn, A Study of Fairness in Fourball Golf Competition, *Optimal Strategies in Sports Economics and Management (S. Butenko, J. Gil-Lafuente, P. Pardalos, Eds.), Springer Series in Financial Economics, 1st Edition, 2010, XVI, pp. 143 – 170*

World Golf Hall of Fame, St. Augustine, FL

Fantasy League?

Did you Analyze Your Team's Network First?

Panos M. Pardalos

Distinguished Professor of Industrial and Systems Engineering

Sports have been an integral part of human culture since ancient times and play a key role in the economy, politics, and lifestyle of any country.

Many sports, including football, baseball, basketball, track and field, hockey, tennis, and golf, and their associated industries, rely on decision-making tools from a wide spectrum of techniques in economics, networks, and optimization.

The ancient Greeks spoke vividly about the human condition, with phrases such as a "healthy mind in a healthy body." The thought of exercising the human spirit along with the human body was established very early in the Greek world, thus instilling the concept of physical and mental harmony of the human being.

In the Greek states, social processes aimed towards intellectual development and physical perfection eventually culminated in the institutionalization of the Olympic Games, which graced the ancient world with the ideal of fair play for over a thousand years. This tradition inspired people to revive the Modern Olympics, thus promoting the ideal of fair play in the modern world. This resulted in the amazing proliferation of sports in our time, while also contributing to a giant economic boom spurred by the extended activities around sports and the Olympics.

Today's sports industry is complex and impacts several economic markets, such as television, advertising, clothing, and manufacturing. In addition, sports are characterized by a unique need for competitive balance. As early as 1964, the economist Walter Neale stated the "Louis-Schmeling paradox" in that better profits could be made from a better product, which in boxing, meant two strong fighters. Louis could not have made it without a strong Schmeling.

It is clear that in most businesses the ideal market position of a company is a monopoly. But in sports, it is much different. Given the paradox, a pure monopoly would be a disaster. Fans want to see a competitive balance among teams in order to keep their interest. (Neale referred to this as "inverted joint products.")

Systems engineering tools can be used to study many issues in sports. For example, social network analysis deals with the interactions between individuals by considering them as nodes of a network whereas their relations are mapped as network edges. The study of such structures lies at the intersection of different disciplines of research, including economics, sociology and graph theory. In practice, many kinds of networks have been studied, including friendship networks, scientific co-authorship networks, film collaboration networks, disease spreading networks, and urban growth networks.

We have also studied social networks arising in sports. The structure of sports networks, as well as properties of their dynamics, can be useful in the management, economics and marketing of sports.

Social networks arise naturally in sports, especially team sports. For example, such networks may be based on the various relationships: athlete-athlete, coach-athlete, athlete-clubs, etc. In addition to a single player analysis, the analysis of sports networks may be used to investigate patterns of social relations between team members, as well as to explore the behavioral dynamics of groups of teammates. This information may help coaches, players, managers and other club members in making decisions.

As an example, we (Boginski et. al, 2004) considered the National Basketball Association (NBA) from the perspective of social networks. We constructed and studied a social network graph of players in the NBA. It turned out that the properties of this graph are similar to the properties of other social networks.

The vertices of the NBA graph represent all the basketball players who played during the 2002-03 season. An edge joins two given players if they ever played in the same team. The constructed graph has 404 nodes and 5492 edges between them. Thus, the edge density of this graph is rather small: $5492/81406 = 6.75\%$.

Based on the definition, one can state some obvious structural properties of the NBA graph. For example, players from the same team form a clique in the graph. Also, since many players change teams, there exist links between players (vertices) from different teams (cliques). Clearly, the same structure is inherent for all collaboration networks.

The considered NBA graph is connected, due to the fact that the number of players in a basketball team is relatively small and players transfer between different teams frequently. Furthermore, we observed that this graph has a 'small-world' topology. That is, the maximum distance between all pairs of vertices (graph diameter) in the NBA graph is equal to 4, implying that the NBA is a very small world.

Analogous to the Erdos number for the collaboration graph of mathematicians and the Kevin Bacon number for a graph of Hollywood actors, the "Jordan number" was introduced for the NBA graph. A player's Jordan number is defined as the distance in the NBA graph between the vertex corresponding to that player and the vertex corresponding to the former Chicago Bulls player, Michael Jordan, arguably the greatest basketball player ever.

Despite the fact that Michael Jordan only played for two teams throughout his career, and thus had relatively few "collaborators," most players (268) in the studied NBA graph have a Jordan number of either one or two; the maximum Jordan number is only three. This means that all players are connected to Jordan through at most two vertices, which again confirms that NBA is a 'small world'.

Similar collaboration networks have been considered for soccer and other types of sports. All such networks consisting of players have proved to be 'small worlds'. One might suppose that networks which can be constructed in the same way for other team games or leagues have similar structure.

There are many interesting questions related to the behavioral dynamics of sports networks. For example:

- Using the existing patterns of connections in a sports network and a variety of graph-theoretic and statistical techniques, how can one predict new relationships that will form in the network in the near future?
- What are the dynamics of the information flow in a sports network? How can one extract knowledge from this information?
- How can the future of a sports network be predicted from the current state of the network?

Answers to these questions may have implications in management, marketing, advertising strategies, ticket sales, and safety in large sporting events.

For further reading

V. Boginski, S. Butenko, P. M. Pardalos, and O. Prokopyev. Collaboration networks in sports. In S. Butenko, J. Gil-Lafuente, and P. M. Pardalos, editors, *Economics, Management and Optimization in Sports*, pages 265-277. Springer, 2004.

S. Butenko, J. Gil-Lafuente, P.M. Pardalos (eds.), *Economics, Management and Optimization in Sports*, Springer, 2004.

S. Butenko, J. Gil-Lafuente, P.M. Pardalos (eds.), *Optimal Strategies in Sports Economics and Management*, Springer, 2010.

Thai, M.T. and P.M. Pardalos (eds.) *Handbook of Optimization in Complex Networks: Communication and Social Networks*, Springer, 2011.

Summer, 2012 graduates

The Department conferred 14 undergraduate and 17 graduate (M.S. and M.E.) degrees for the summer of 2012. Our graduates are in great demand, as always. According to the information gathered from exit surveys, fifty percent of our undergraduate students have already accepted jobs in industry, with employers such as Trane, Crowley Maritime, Walt Disney, the Eaton Company, and American Express. Another twenty-one percent were headed to graduate school. Additionally, seven Ph.D. students successfully completed their studies this summer. Profiles of all 2011-2012 Ph.D. graduates are on page 14.

B.S. in Industrial & Systems Engineering

Biffel, Tucker J.
Brown, Stephanie Lynn
Cacicedo, Victoria
Chinchilla, Andrea
Fleischer, Eduardo
Gallagher, Patrick W.
Mann, Jamie Elias

McEachran, Jared M.
Menke, Christopher K.
Mouad, Rami Ali
Nelen, Andrew Conley
Panmunin, Krithong L.
Sanchez, Jessica N.
Zaremby, Alixandra L.

M.S./M.E. in Industrial & Systems Engineering

Aggas, Katelyn E.
Bertoni, Christopher
Budram, Vijay
Cha, Jinho
Choo, Alex Che Ming
Hulbert, Eric W.
Lindsey, Jill Elizabeth
Lyon, Peter John

Malik, Uzair
McCabe, Henry Joseph
Nguyen, Ken V.
Saar, Matthew R.
Sahni, Shivam
Su, Suiyi
Vogiatzis, Chrysafis
Wirth, Jason T.
Zhang, Yilu

The Story Behind The Fan

I staggered back and forth under a towering pop-up directly behind home plate. I was a 15-year-old catcher playing the summer-league city championship game in a major league ballpark, Crosley Field, home of the Cincinnati Reds back in 1954. And dealing with a pop-up behind home plate was a brand-new challenge for me since batting cages had prevented pop-ups in previous games. The towering pop-up finally descended, the ball tightly wedging itself between my catcher's mitt and outstretched bare hand. LESSON: Put yourself in a position where lady luck (or "probabilistic outcomes") can favor a successful result.

That catch, lucky or not, was the final out of the game, clinching a perfect 29-0 season for my Knothole League baseball team. We had acquired a new player, a catcher, the previous season. Our coach noticed that this new catcher was firing the ball back to the pitcher faster than the pitches were coming in. So the manager made our new player the pitcher and brought me in from the outfield to be the catcher. The result was that 29-0 season of success. LESSON: Carefully evaluate your resources and assignments, searching for areas of improvement.

That fall, I went from an undefeated baseball team to playing on a high school football team that didn't win a single game. The abrupt change of fortunes—from ecstasy to adversity, from perfection to failure—was demoralizing but educational. LESSON: Learn from failure but don't dwell on it—look ahead to new opportunities.

Indeed, basketball season was right around the corner, and I was one of four sophomores that became starters on the varsity that year. We suffered several early-season league losses while gaining experience—but then reeled off a record 28 straight wins in the conference over the next three years, graduating with the streak intact. Our coach was very demanding. LESSON: There's always a learning curve, and hard work pays off.

Playing basketball at the college level was both challenging and humbling; the highlight of my two-year career at the University of Michigan was four points against Ohio State one snowy night down in Columbus back in 1959. But I ended up marrying an Ohio State gal, and we made the transition from the Big Ten to the SEC when we moved to Gainesville (and the ISE Department) in 1966.

LESSON: Sometimes the enemy can become your best friend (or even a spouse)—and new environments can be invigorating.

Indeed, it was a thrill watching the wide-open style of SEC football instead of the stodgy Big Ten ground game of that era. Steve Spurrier led the Gators to some magical last-minute wins, the most memorable being his long field goal to beat Auburn. Three years later the pass-catch combo of Reaves-to-Alvarez sent shock waves through the league, and my wife and I settled into becoming "Gatorized" into hard-core fans, bleeding Orange and Blue while absorbing painful losses and celebrating great victories.

When the O'Connell Center opened in 1980, we had courtside seats behind the visiting bench, best seats in the house, though sometimes we saw too much. Two cases in point: when the Vanderbilt basketball coach split the seat of his pants and when Wimp Sanderson, the Alabama coach—who wore a Madras jacket and the ugliest, craggy-faced expression you ever saw—would turn around and growlllll at us. Otherwise it's been great fun helping the visiting coaches coach and the referees make the calls for over three decades. When Billy Ball came to town in the 1990s, the ascent to excellence in both major sports began in earnest, climaxing with that incredible run of four national titles, two in hoops and two in football, in '06 to '08.

Sports have obviously been a big part of my life, from little-league baseball to being the best Gator fan I can be. And, yes, team sports teach us life lessons, from cooperation and a collegial spirit to ethical conduct and being both humble in victory and graceful in defeat. Hopefully, your professional career reflects those traits and values—and we can join together each season to say GO GATORS!!

Dr. Jim Burns,
Professor Emeritus

OPTIMIMIZATION IN THE SPORTS WORLD

J. Cole Smith
Professor of Industrial and Systems Engineering
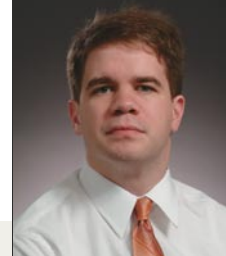
One enjoyable aspect about teaching operations research courses is sharing the breadth of applications that can benefit from optimization models. The problem of scheduling games in a sports league is probably the most tangible and accessible application. The goal is to schedule games for an entire league, but make sure that the schedule is fair to everyone. "Fairness" may consist of ensuring that no team has to play too many games in a small window of time, play many several consecutive road games, and so on. (For instance, Florida's football program has not had to play three straight road games since 1995; even that arrangement took place under extenuating circumstances. Besides, Florida prevailed in all three games.) Nemhauser and Trick [2] provide an interesting discussion on scheduling optimization for college basketball, including home/road balance issues and other scheduling challenges related to television constraints.

But if you dig beneath this standard scheduling challenge, where else would you see optimization in sports? As this issue is coming out, the Major League Baseball playoffs just finished. Imagine a situation in which five teams are battling for one playoff spot, and the team having the most wins makes the playoffs. Currently, let's say that the standings and remaining games are shown in Table 2 below. (Each game is either won or lost; no games are tied.)

Team E has 15 remaining games, and can afford to lose only nine more: six more wins will get them to 84 wins and tie team A (and of course, they'd have to hope that team A loses the remaining games). Team E's "elimination number" is thus said to be ten. But can team E really lose nine games? If team A loses their remaining games, then team B must have won at least three times (versus team A), which gives them 84 wins. So team B loses all other games except for those three. But team C has nine games total versus A and B, and those wins over A and B would give them 89 wins!

How many games can team E actually lose? If we say they can lose k games, then to prove that it is still possible for E to finish with at least as many wins as everyone else, we have to also figure out how many times A should beat B, how many times A should beat C, etc., for this to happen. (In particular, you also need to know which set of k games team E can afford to lose.) Hence, we've got a very nice integer program: Maximize the number of games E loses, but require that (a) there is a winner for every remaining game (e.g., the number of games A wins versus B, plus the number B wins versus A, must equal three), and (b) team E needs to end up with at least as many wins as every other team. In this case, it turns out that team E can actually only lose five more games, not nine. See [1] for a broader discussion on these issues.

Speaking of playoffs, several tournaments contain eight (or 16) teams, with each team seeded from 1 (the best) to 8. Almost invariably, seed 1 plays seed 8, and seed 4 plays seed 5 in the "top half" of the bracket, while 2 plays 7 and 3 plays 6 in the "bottom half" of the bracket. In round two, the top-half winners (those from the 1/8 and 4/5 games) and bottom-half winners (those from the 2/7 and 3/6 games) play. The two second-round winners then play in the third-round (championship) game. (This is called the "standard bracket.") For 16-team tournaments, the organization of the tournament follows the same pattern.

The idea is that team 1 has the easiest path to the championship, team 2 has next-easiest path, and so on. Sometimes, of course, it is possible to look at the bracket and realize that, e.g., the 4-seed might want to switch places with the 6-seed for some reason. This is actually not too uncommon, because teams may want to avoid playing a dominant team too early (see the badminton scandal in the 2012 Olympics!). Mike Prince (a UF ISE Ph.D. student), Prof. Joe Geunes, and I asked the question of when a bracket is "fair," when one defines "fair" as follows: The odds that team i advances to any given round should be at least as good as team j's odds.

To do a study like this (see [3] for details), one has to make some fairly simple assumptions on how likely it is that one team beats another. (If you want the gory details, contact me for the paper.) It turns out that this standard bracket is not always fair (sometimes, there are no fair brackets!). To find a fair bracket for an 8-team tournament, one might have to enumerate over 8! = 40,320 possible brackets. However, most of these are symmetric to one another. Only 315 are unique, and out of those, we prove that only 20 could ever be fair. (The situation is substantially more challenging for 16-team tournaments.)

Seeking a fair bracket is practical in settings where travel budget is limited (e.g., in amateur events): It may be best to alter the standard bracket to reduce the amount of necessary travel, while still maintaining the fairness of the tournament. Incidentally, the idea of reducing team travel within tournaments was the genesis of a paper co-authored by Dr. Chase Rainwater (a 2009 Ph.D. graduate of our department, now an Assistant Professor at the University of Arkansas), Dr. Barbara Fraticelli, and me. We sought to minimize expected travel distance of NCAA Basketball Tournament teams by strategically placing teams in the bracket, subject to the many regulations governing the bracket composition [4]. (That paper is also available upon request, as is a separate study [5] on the NCAA Baseball Tournament.)

As with any field of interest, one idea tends to spark another. Can we use optimization to figure out how to arrange sports coverage on TV? Can we use it to optimize in-game strategy, such as where high-jumpers should set the bar during their attempts? For determining two-point strategies? The answer is "yes" to all of the above. With the massive stores of data being recorded for seemingly every competitive event, the opportunities for infusing optimization and sports are just getting started.

[1] I. Adler, A. L. Erera, D. S. Hochbaum, and E. V. Olinick, "Baseball, Optimization, and the World Wide Web," Interfaces, 32(2), 12-22, 2002.

[2] G. L. Nemhauser and M. A. Trick, "Scheduling a Major College Basketball Conference," Operations Research, 46(1), 1-8, 1998.

[3] M. Prince, J. C. Smith, and J. Geunes, "Designing Fair 8- and 16-team Knockout Tournaments," to appear in IMA Journal of Management Mathematics (10.1093/imaman/dpr024), 2012.

[4] J. C. Smith, B. M. P. Fraticelli, and C. Rainwater, "A Bracket Assignment Problem for the NCAA Men's Basketball Tournament," International Transactions in Operational Research, 13(3), 253-271, 2006.

[5] J. C. Smith, "Organization of the NCAA Baseball Tournament," IMA Journal of Management Mathematics, 20(2), 213-232, 2009.
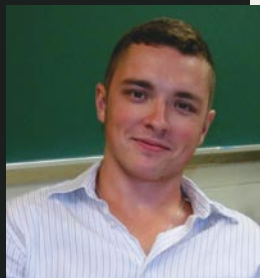
Table 2:

Number of wins		Remaining Games Among Teams				
			A	B	C	D	E
TeamA	84						
TeamB	81	A		3	6	5	0
TeamC	80	B			3	3	4
TeamD	78	C				0	6
TeamE	78	D					5

Ph.D. Graduates

Benham Behani

Konstantin Kalinchenko

Alexey Sorokin

Kelly Sullivan

Gonca Yildirim

Chin Hon Tan

Clay Koschinick

BENHAM BEHDANI
Hometown: *Birjand, Iran*
Schooling: *Sharif University of Technology*
Dissertation Title and Advisor: *"Discrete and Geometric Approaches to Lifetime Maximization in Wireless Sensor Networks" (Advisor: Dr. J. Cole Smith)*
Current Position: *Senior Operations Research Specialist at BNSF Railway*
Personal: *""I miss Gainesville!"*

TIANKE FENG
Hometown: *Beijing, China*
Schooling: *Beijing University of Technology*
Dissertation: *"Stochastic and Dynamic Sequential Decision Problems with Postponement Options" (Advisor: Dr. Joseph Hartman)*
Current Position: *Industrial Engineer at Walt Disney Company*
Personal: *"I am thrilled to start my career but still stay in Florida."*

KONSTANTIN KALINCHENKO
Hometown: *Protvino, Moscow Region, Russia*
Schooling: *Moscow State University, Department of Mechanics and Mathematics*
Dissertation: *"Optimization with Generalized Deviation Measures Measures in Risk Management" (Advisor: Dr. Stan Uryasev)*
Current Position: *Quantitative Analyst at Deutsche Bank Securities Inc.*
Personal: *"UF offered me not only a great set of opportunities for professional development and launching career of my dreams, but also inflated the PhD episode of my life with social adventures, priceless experiences and an army of friends from all over the World!"*

ALEXEY SOROKIN
Hometown: *Voronezh, Russia*
Schooling: *Voronezh State Technical University*
Dissertation: *"Modeling and Optimization Techniques for Ensuring Resilience in Heterogeneous Networked Systems" (Advisors: Dr. Panos M. Pardalos and Dr. Vladimir Boginski)*
Current Position: *Senior Systems Engineer at Innovative Scheduling*
Personal: *"I enjoy applying optimization techniques for solving real-world problems in transportation and logistics."*

KELLY SULLIVAN
Hometown: *North Little Rock, Arkansas*
Schooling: *University of Arkansas*
Dissertation: *"Two-Level System Interdiction" (Advisor: Dr. J. Cole Smith)*
Current Position: *Assistant Professor at University of Arkansas*
Personal: *"I'm graduating, moving back home, and getting married all within a few months. What a summer!"*

HONGSHENG XU
Hometown: *Chengdu, China*
Schooling: *Tsinghua University*
Dissertation: *"Electricity Blackout and Power Security: Survey and Analysis" (Advisor: Dr. Panos M. Pardalos)*
Current Position: *Research Scientist at University of Florida*

GONCA YILDIRIM
Hometown: *Ankara, Turkey*
Schooling: *Bilkent University*
Dissertation: *"A Demanufacturer's Optimal Acquisition, Pricing, and Inspection Planning Problems" (Advisor: Dr. Elif Akcali)*
Personal: *"Happy to be a part of the Gator Nation."*

CHIN HON TAN
Hometown: *Singapore*
Schooling: *National University of Singapore*
Dissertation: *"Optimization under Uncertainty: Sensitivity Analysis and Regret" (Advisor: Dr. Joseph Hartman)*
Current Position: *Assistant Professor at National University of Singapore*
Personal: *"Miss Gainesville but glad to be home."*
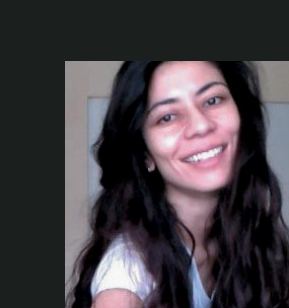
CLAY KOSCHNICK
Hometown: *Cheyenne, Wyoming*
Schooling: *Air Force Academy, Georgia Institute of Technology*
Dissertation: *"Designing Performance Guarantee Contracts" (Advisor: Dr. Joseph Hartman)*
Current Position: *Program Manager at U.S. Air Force*
Personal: *"My family and I are thankful for our experiences in Gainesville and the lifelong friends we made."*

ALUMNI UPDATES

Harold D. Haldeman, Jr. (BS '50) has established "The Harold D. Haldeman, Jr. Fellowship Endowment." The funds are to be used to support graduate fellowships in Industrial and Systems Engineering.

Mr. Haldeman served in the U.S. Navy as an Aviation Electrician for two years and later attended the University of Florida. As a student, he was always interested in both engineering and business, serving as an officer in the Society for the Advancement of Management – a precursor to the Institute of Industrial Engineers. Upon graduation, Mr. Haldeman made his mark in logistics in the paper industry, efficiently moving wood products to market. Within two years of graduation, he became general manager of Forest Products Corporation of Ft. Lauderdale and shortly thereafter was named President and CEO. He also served as the Florida manager for American Forest Products.

John Jenkins (BS '73) retired from Cingular Wireless / BellSouth in 2005 after a 32-year career. While he still consults (including an 18-month project building cell towers in Costa Rica), his attention has turned to family, travel and Boy Scouts.

Chris Seibert (BS '92) is the OVP – Industrial Engineering at Home Shopping Network. He has been with the firm since 2000.

Ashutosh Dekhne (MS '00) is now an EM at McKinsey & Company.

Mauricio Urdaneta (BS '05) is now a Senior Industrial Engineer (Process Engineer) at Rockwell Collins in Melbourne. He was previously an IE with Big Lots.

Sean Gardiner (BS '06, MS '08) is an Industrial Engineer with Alegent Creighton Health in Omaha, Nebraska.

Guillermo Moratorio (BS '08) is now a project manager at Voalte in Sarasota. He previous worked in Colorado in the construction business.

Megan Berry (BS '09, MS '10) has entered the second year of the Manufacturing and Operations Leadership Program at Campbell Soup in which she will complete a rotation as a production supervisor.

Jamison Caloras (BS '09) recently moved from SumTotal Systems to Parisleaf Printing and Design in Gainesville.

Lola (Julie) Disparte (BS '09) is an Organization Consultant at The Occasional Wife in New Orleans. She uses her IE background to effectively manage and streamline people's homes (especially big ones!).

David Tumblin (MS '09) is now a System Requirements and Integration Engineer at Lockheed Martin. Previously, he was employed by DRS Tactical.

Cristina Rivero (BS '10, MS '12) is now an Associate Operations Analyst with RTI Biologics in Gainesville. She was previously working with Shands Management Engineering Consulting Services. She is still the Director at Projects for Haiti, Inc., also in Gainesville.

Susie Allen-Sierpinski (MS '10) is now a Systems Safety Engineer at ASRC Research and Technology Solutions (ARTS) VP at Cater Call USA.

David Medoff (BS '11) and **Kelsey Kempler** (BS '11) (pictured) are both working on the production of the F-35 in Marietta, Georgia. Kempler is currently a Level 2 Industrial Engineer and Medoff is in the Operations Leadership Development Program.

Melissa Saelzer (MS '11) is now a Systems Engineer at GE Transportation in Melbourne, Florida. She was previously with DRS Tactical Systems.

After nearly two years of planning and development, the Young Alumni Advisory Board was initiated on Friday, October 5. Lead by Kathryn Blackwell (BS ISE 2009), Jessica Hinkle (BS ISE 2009), Natalie Keller (BS ISE 2010) and Guillermo Moratorio (BS ISE 2008), the board was formed in order to foster interaction between young Industrial and Systems Engineering alumni and the Department.

Specifically, the board has four committees with the following functions:
Engagement: Enlist the time and knowledge of our young alumni to connect ISE students with industry.
Feedback: Provide insightful feedback to the department regarding the professional preparation of students.
Pipeline: Create a formalized young alumni relationship management program.
Support: Initiate and maintain financial development plans to enable lifetime giving by ISE alumni.
If you are interested in the getting involved with the group, send an email to YAABGator@gmail.com.
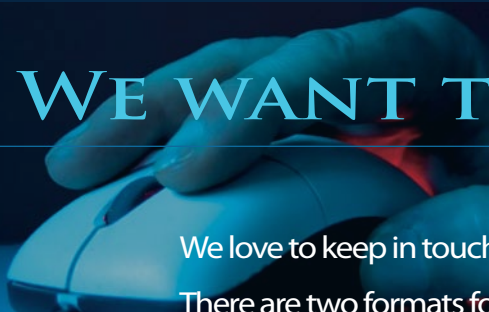
Kempler and Medoff

YAAB

UF | UNIVERSITY *of* **FLORIDA**

DEPARTMENT OF INDUSTRIAL &
SYSTEMS ENGINEERING
303 Weil Hall
P.O. Box 116595
Gainesville, FL 32611-6595

WE WANT TO HEAR FROM YOU!

We love to keep in touch with our alumni—please help us.

There are two formats for your information—you can fill out the information below

and mail it to us, or you can fill out our online form at http://www.ise.ufl.edu/census/.

http://www.facebook.com/ufise

http://www.linkedin.com/groups?gid=153333

Name Address: _____

Email Address: _____

Graduation Year: Degree earned: _____

Current job title: _____

Company: _____

Thanks so much for your help!