

#### **VIEW FROM THE DEPARTMENT CHAIR**

Good news: our new folks are settling in well. Ginny is making the administrative assistant's role truly her own, quickly learning about all aspects of our department's life, and organizing everything in our turf for greatest efficiency. And Flavia is quickly acclimating to Witt's ways, helping out where we need it most, especially in the applied math courses; we're now figuring out how much of the computational science program duties we can realistically expect a new person like her to take on, too. You can read about their stories in more detail in feature articles in this issue.

The more structured departmental colloquium series is in its second year, and it seems to be settling in now, too. Somehow Brian manages to find speakers for about half a dozen events every semester – either Witt students presenting the results from their research or summer programs or internships, or Witt faculty members introducing everyone to a special topic, or speakers from outside Witt to talk about academic or career-related ideas. We even tried a departmental registration advising event this fall, and we'll refine that event and bring it back next semester, too. Attendance has been great, with an average of over 40 people. If you haven't been to a SMACCM yet, check out the bright fliers around the building that advertize the events or click on the "Colloquium" link at our web site, and come on out on a Monday afternoon sometime soon.

Although it wasn't an official SMACCM colloquium, we were grateful that 5 loyal alums came back to engage our students in a panel discussion and Q&A session on Friday of homecoming weekend. Thanks go out to **Bert Price '61**, **John Morgan '98**, **Emily (List) Dennett '07**, **Steve Dennett '07**, and **Nick Kovach '08**, for taking the time to share their insights about the post-Witt world and how to best prepare for it. It's always great to hear from our alums.

Our Witt students continue their strong showing at various contests. This year, a Witt team took ninth place out of well over 100 teams in the ACM's huge international programming contest this fall, once again beating teams even from large universities with huge computer science programs. And we have several students signed up to take the killer Putnam exam this year, which is held on the first Saturday of each December. Both of those contests are incredibly challenging. For those interested in more manageable challenges, look for the annual Denison programming contest and 4-college contest in the spring semester.

Keep up the good work, everyone, and have a good winter break.

Doug Andrews

# **SPOTLIGHT ON OUR NEWEST TIGER: FLAVIA SANCIER-BARBOSA**

Not only did the Math/Comp Department have to say its farewell to Sharon last year, but Eric Stahlberg, a big contributor to the Computational Science program, also departed. In order to offer the courses that Dr. Stahlberg originally taught and bring some new experience into the Math/Comp Department, the university granted the department permission to hire a full-time visiting professor. After many interviews and a strong pool of qualified applicants, **Flavia Sancier-Barbosa** was chosen to be Wittenberg's newest addition the already fabulous Math/Comp Department.

Flavia grew up in Rio de Janeiro, Brazil and lived there until she was 18 years old. Her

Table of Contents	
View From the Chair	1
Spotlight on Flavia	1,2
Welcome Ginny!	2
Stellar Math Athletes	3
Faculty Notes	4,5
Alumni Notes	6,7
Major News	7
New Majors & Minors	8

Table of Contents

Continues on pg 2

## **SPOTLIGHT ON OUR NEWEST TIGER: FLAVIA SANCIER-BARBOSA (cont.)**

family still resides there today. Flavia went on to do her undergrad at Universidade Estadual de Campinas (UNICAMP), in Campinas, Sao Paulo, Brazil, and then get her Master's and Ph.D. degrees from Southern Illinois University at Carbondale. Her research interests are in Stochastic Analysis, Probability, and Mathematical Finance.

Having only worked as a TA in grad school, this is Flavia's first full-time teaching job out of grad school, and Wittenberg is honored to have her. When it came to looking for a job, the idea of working at a liberal arts college stuck out to her. Flavia explains that "one of my roommates in grad school did her undergrad in a liberal arts college, and every time she would tell stories about the dynamics in her school, I would think that I would enjoy teaching in a place like that."

Currently residing in Yellow Springs with her fiancé Dave and their dog, Ozzie, Flavia is indeed enjoying her time at Wittenberg. Not only does she love her job, but she especially likes all of the people she has interacted with. Her favorite part of the

job, however, is seeing the creativity. Flavia says that she enjoys "when a student approaches a problem in an unconventional or new way. Thinking outside the box: that's the kind of math I enjoy the

In her first semester here, Flavia took on the role of teaching Elementary Functions, Differential Equations, and Numerical Analysis. Three preparations is certainly a challenge for any new faculty member. Next semester she'll be teaching two sections of Calculus 1, along with Computational Models and Methods. Heading into the future, Flavia looks forward to learning from the Wittenberg community and becoming a positive contribution to Wittenberg and the students she interacts with. The Department is happy to have Flavia as their newest member, and so are all of the stu-

## **WELCOME TO THE DEPARTMENT, GINNY!**

most."

dents she has taught thus far!

As we wrapped up the spring semester of the 2010-2011 school year at Wittenberg, the Math/Comp Department was saying their goodbyes to Sharon Shambaugh who, for 17 of her 25 years here, was the amazing administrative assistant for both the Math/Comp Department and the University Honors Program. Although not an easy thing to do, the department had to start looking for a replacement. Thankfully, Wittenberg had to look no further once they found the amazing Virginia Harkins.

As a proud Northeastern Alum, Ginny is happy to be working in the town that she has always known as her home. When asking Ginny what made her decide to join the Wittenberg team, she explained that having been at Wittenberg

previously, she knew what a good place this is to be at. What some may not realize is that Ginny has actually fulfilled many important roles here at Wittenberg University before assuming the administrative assistant position for the Math and Computer Science Department. Ginny started out as the Executive Assistant to the Provost, and then eventually returned to work as an Administrative Assistant in the Office of International Education for two years before taking on her newest position.

Ginny has truly loved both her past and present time here at Wittenberg. When asking about her favorite part of the job, Ginny says that she enjoys "being able to work closely with the students and faculty." She expressed how much she truly loves working with everyone in the Math and Computer Science Department. As she continues to settle into her newest position and moves into a fresh semester, Ginny most looks forward to "learning all aspects of the position and becoming a valuable member of the Department." The Department is very grateful to have Ginny as a part of their stellar team, and they cannot wait to see what great work she will accomplish in her time here!

Dr. Flavia Sancier – Barbosa







## **STELLAR STUDENT-ATHLETE MATH MAJORS**

As a university that offers 23 varsity sports and countless club and intramural sports, athletics is a huge part of campus life at Wittenberg. The Wittenberg Athletic Department strives to truly embrace the term "student-athlete," but making it clear that, above all, these players are students first and foremost. As ideal as this may sound, being both a student at a well-known liberal arts college as well as an athlete for a successful NCAC team is harder than it seems. Balancing rigorous course loads alongside the countless hours of conditioning, lifting, practices, film, games, and more can be quite the challenge. Thankfully, Wittenberg University has many students willing to step up to the challenge. Of these student-athletes, we would like to recognize some of the hard-working math majors and show an inside look as to what it is like to truly be a student-athlete for the Wittenberg Tigers!

Kellen Morrissey '13, a math major and education and business minor, is a proud and successful member of both the Wittenberg Women's Field Hockey team and the Wittenberg Women's Lacrosse team. When it comes to managing her time, she realizes that most student athletes have similar struggles, but she has found that "it's very doable and very worthwhile!" One way Kellen balances her time is by going into the Math Workshop between classes so that she can find time to do my work without any athletic conflicts. When it comes to her sports, Kellen says that having strict sports' schedules has actually helped her time management and forces her to plan ahead and stay organized. In terms of support, Kellen had nothing but good things to say about her professors: "The professors have also been more than understanding and accommodating of my field hockey and lacrosse seasons. They meet with me in their spare time to catch me up if I ever need to miss a class, and they always make sure to wish me good luck on game days!" When asking Kellen why it is that she loves being a math major, she said "it is a very practical and marketable skill to have, and I like being able to help my non-math major friends with their math assignments!" Kellen has earned many awards, as well as being a three year letter winner for Field Hockey, and a two year letter winner for Lacrosse.



Kellen attacks the ball like she attacks her classes.

Sven Isaacson '13, a double major in physics and mathematics, is a two year letter winner and a strong thrower for the Wittenberg Men's Track and Field team. When it comes to being a student-athlete for Wittenberg, what Sven appreciates most is that his coach recognizes his academic responsibility and similarly his professors respect his athletic involvement. Overall, Sven believe that "being a committed student while participating in athletics is difficult to manage but is very fulfilling." Sven is a two year letter winner, and looks forward to another successful season!

Claire Shannon '13, a math major and education minor, is a very successful swimmer for the Wittenberg Women's



Claire Shannon

Swimming and Diving Team. When it comes to trying to balance being a student and an athlete, Claire says, "It takes a lot of time management, but I feel like most people who like math are very structured people so staying busy actually keeps me on task." In order to get things done, Claire usually spends most of her day working, between classes and after practices, and then uses the weekends to de-stress. Overall, she does her best to make sure she gives classes and swimming equal dedication. Claire feels extremely supported by the Wittenberg staff, especially her advisor, Dr. Andrews, who shares her love for swimming. As a recent transfer from the University of South Carolina, she is not used to seeing the stands full. Now at Wittenberg, she has had at least two meets where the stands have been packed full of not only peers, but also faculty and staff! In the end, Claire's favorite part about being a math major is the respect and commitment from the staff. She feels that "they know you picked a hard major and are always there to push you and support you."

The Math Department is proud to support all of our fellow athletes, including others such as Alan Trump '12 (football), David Rea '12 (soccer), Lauren Henry '12 (vollevall), Adam Markins '13 (track & cross country), and Sarah Skidmore '13 (basketball) and wishes them the best of luck in their upcoming seasons! Just remember, if you're an athlete and a math major here at Wittenberg University, you are sweeter than pi!

#### **FACULTY NOTES**

**Doug Andrews:** I got a neat invitation earlier this year to lead workshops for mathematicians who are assigned to teach stat courses, as part of Project NExT, which is the MAA's professional development program for new PhD's in math. So I did that gig down at MathFest in Lexington in August, and have been corresponding with the participants about stat education ever since. Also over the summer I went on another week-long bike trip with friends, this time in southern Wisconsin, where we ate more cheese than you can think about. Aside from that, my summer and fall have been filled with helping Mom take care of Dad's health, plus the usual classes and department chair duties, like personnel reviews and program assessments. Not very exciting, but all worthwhile stuff. And I got elected to the President Search Committee this fall, so we're hard at work finding a good candidate for who can lead Witt into the future as Witt's next president.

**Steve Bogaerts:** My classroom work has looked rather different this semester. In the Introduction to Programming I course, I've been using a more graphics-oriented approach developed by Mark Guzdial of Georgia Tech. This means that students have been learning basic programming concepts likes loops, functions, and if statements in the context of image effects like color/grayscale transformations, sepia tones, steganography, blending, and chromakey. I've merged this with many of the more traditional course topics in hopes of giving students a fun and well-rounded experience.

I've also enjoyed teaching a cybersecurity course for the first time this semester. As the public increasingly depends on internet technologies for communication, commerce, banking, medical records, secrets, and much more, the consequences of a cybersecurity breach are increasing at an alarming rate. Every computing professional today must be conversant in core cybersecurity technologies, forming the defense that every organization must erect in the face of this growing threat. It has been very interesting to examine these concepts. We are also fortunate to have two guest speakers this semester: Scott Powell, Director of Infrastructure and Support at Information Technology Services at Wittenberg, and Rusty Baldwin, Associate Professor of Computer Engineering and Director of Research at the Center for Cyberspace Research at the Air Force Institute of Technology.

**Bill Higgins:** In August, I attended MathFest, the summer national meeting of the MAA in Louisville, KY. At the meeting, I served as a judge for the undergraduate student paper session. My wife, Aparna, who math teaches at the University of Dayton, and our son Vijay also attended the conference. Vijay is a first year student at the University of Notre Dame and plans to major in mathematics. The three of us also attended Undergraduate Math Day at the University of Dayton in early November along with Wittenberg students Courtnay Dollinger and Deanna Fink.

In late October, I attended the fall meeting of the Ohio Section of the MAA at the University of Findlay. Immediately following the conference I took part in a workshop lead by Dr. Barbara D'Ambrosia on an "Introduction to GeoGebra 4.0". GeoGebra is software which is designed to create applets one can use in class to introduce topics dynamically. As a simple example, one can create an applet to demonstrate graphically how the tangent line at a point may be found as the limit of secant lines. I have used such applets written by others in Calculus 1 and 2 classes in the past and look forward to trying my hand at creating applets on my own.

**Al Stickney:** As I write this, we are getting ready to take part in the Putnam Contest again this year. It looks as though we will have about 8 students taking the test. As is the tradition, my wife and I will be hosting a "Putnam Lunch" for the participants at my house. We all look forward to that, especially since it includes a famous Bill Higgins cheesecake.

Because of my duties as Governor of the Ohio Section of the MAA, I've been traveling more than usual recently. In the past 30 months, I've been to Portland, Oregon, San Francisco, Pittsburgh, New Orleans, and Lexington, Kentucky. I'm now preparing to go to Boston in January. I'm especially pleased to be traveling to Boston since one of my daughters lives there, and it will give me a chance for a visit.

Meanwhile, back here at Wittenberg, this fall has turned out to be a very busy time for me. I have found myself with a fair amount of responsibility in Wittenberg's faculty governance system, and it is requiring a significant amount of time and effort. Of course, I'm still teaching 3 courses this semester: Calculus I, Applied Matrix Algebra, and Foundations of Geometry. I thoroughly enjoy each one of these classes, but in particular, the Matrix Algebra class is an absolutely out-

#### **FACULTY NOTES (CONTINUED)**

standing group of students. I'm also looking forward to next semester when I'll once again have a chance to teach Number Theory, one of my favorite courses.

**Kyle Burke:** I've had a busy and rewarding semester! I've given three talks in different places (Wittenberg, Integers Conference, Supercomputing) and am teaching 3.25 classes (one is 1-credit), 2.25 of them for the first time. The students here continue to be excellent! I am especially proud of my two honors students that are busy kicking butt. Also, our ACM chapter is starting to get active and we've had well-attended weekly game lunches this semester! Awesome!

**Brian Shelburne:** Since I failed to make the submission deadline for the spring 2011 issue of Computational Times, this update will be a bit long.

When Eric Stahlberg left in December I volunteered to teach (with Jim Noyes's help - Jim retired in 2006) Comp/Math 260: Computational Models and Methods for the spring semester. It was a steep learning curve; I was familiar with the various topics covered in the course but had never taught the course before and had little time to prepare for a new course. That made the spring term very busy which may partially account for why I failed to make the Computational Times deadline.

Also from last spring, a paper submitted two years ago to Math Horizons (a publication by the MAA) finally appeared in the April 2011 issue. Titled *Archimedes and the Parabola* it was a modern exploration of Archimedes' famous result where he proved that the area under a parabola is 4/3rds the area of the inscribed triangle – a result any student of calculus can easily prove but Archimedes proved it 2000 years before calculus was discovered (or invented). Since Math Horizons publishes in color, I made use of colored diagrams keyed to colored text – so for example, if triangle MPR was drawn in red in a figure,  $\Delta$ MPR appeared in red in the text.

On to the summer! Part of it was spent on a partial redesign of my Comp 255: Computer Organization course. I had discovered a new textbook that comes with software allowing the reader to build a virtual computer (in software) starting from the basic logic gates up. I thought this might be a useful addition to my Comp 255 courses so I worked on incorporating it into the course. Since I was also working on the Accelerators to Applications project I designed a module (subsequently used as a lab in my fall section of Comp255) where the students built and tested (in software) a 16-bit Carry Look-Ahead adder (a more efficient *parallelized* replacement for the standard Ripple-Carry adder).

Since I'm now also teaching one section of Math 127: Introduction to Statistics every fall, I attended a week-long MAA sponsored workshop on the teaching of statistics (with the generous support of departmental funds which paid for the workshop).

Then another part of the summer was spent on revising a paper titled "The ENIAC's 1949 Determination of  $\pi$ " which was accepted for publication by the IEEE journal *Annals of the History of Computing*. As the tile of the paper suggests, over the Labor Day week-end in 1949, the ENIAC (which at the time was the only computer in the US) computed  $\pi$  out to over 2000 decimal digits braking the previous record of 807 digits. Why this computation was undertaken and more importantly (to me) *how* it was done (the ENIAC could only store 200 decimal digits in a calculation that required dividing by 2000 digit numbers) was the subject of the paper. Part of the research was to reverse engineer how the calculation was done. This meant writing a program to simulate the ENIAC, getting the simulated ENIAC to calculate pi then comparing my calculation to the description given in the 1950 paper announcing the ENIAC's result. It also required tracking down some hard to find documentation and even visiting the archives of the University of Pennsylvania in Philadelphia where the ENIAC was built between1943-46. Though it took a long time to finally get the paper accepted it combined by interest in computer science technology with my interest in history.

**Flavia Sancier-Barbosa:** This was my first semester teaching at Wittenberg and I am very happy to have been given this opportunity. Being fresh out of grad school, this has been a very unique experience, which has certainly kept my hands full. I spent most of the time this Fall taking care of the three courses I was assigned to teach: Elementary Functions, Differential Equations, and Numerical Analysis. I saw some very nice work in Numerical Analysis and Differential Equations, as well as a good effort in Elementary Functions. It was a very valuable experience to teach such a fine

group of students.

In October, I attended the MAA Meeting of the Ohio Section, my first one. I enjoyed it, especially the sessions on the Ohio Project NExT (New Experiences in Teaching). The remainder of my time was spent following up with research from my Ph.D. work. Outside math, I spent part of my weekends racing cyclocross in events around the area. They were fun!

Well, I want to thank Doug, Steve, Al, Adam, Kyle, Brian and Bill for being so welcoming and helpful since I came here. It is nice to see the good dynamics in this department. I look forward to my next semester here!

Adam Parker: My first semester as an Associate Professor was productive and fun.

I really enjoyed my classes this semester. I taught Math 112—The Language of Mathematics for only the second time. I really enjoy this class. Many of the students are math-phobic and none are majoring in math or science. While this certainly leads to some challenges, it has an enormous upside. I think some of the students in that class saw the beauty of mathematics for the first time in a while, and it was very fulfilling to see that happen.

Professionally, I've been working on a few projects. Witt Alum **Amanda Furness '10** and I continue to work on a number theory project as she is in graduate school at Indiana University. I have a paper on the history of the Bernoulli differential equation that I hope to submit in January, and I'm also in the early stages of a project on the Heine-Borel theorem with **Susannah Engdahl '13** and **Nicole Andre '12**.

Next semester I won't be teaching because I'll be on my very first sabbatical! I'm excited for the opportunity to concentrate on some projects that have been on the back burner for a while. Of course, the list of things I hope to accomplish is quite long. I hope that in the next newsletter I'll be able to report that at least a few of those things got completed!

## **ALUMNI NOTES**

**Carol Casey (math major, '91)** went to Miami U right after Witt, got a Master's in higher ed administration, and launched into a career in student development. She worked at Tulane for four years, then landed at Rhodes College (in Memphis), where she has risen through the ranks to become Dean of Students, and is working there still. Carol pops back up here to Ohio once in a while, in part to meet up with some ol' grad school chums in Oxford, and because her brother still lives in the northeast part of the state.

**Julie** (Hochgesang) Melberg (math major, '97) taught high school mathematics for several years, then "got my MA in Mathematics from Cal State Fullerton in 2000, and continued to teach at the high school level until 2006, when my first child was born. Since then, I have been teaching at the university level at Concordia University, Irvine in California. I have taught in the evenings as an adjunct until this past year, and I became a resident faculty member there."

Katie Joseph (math major, '03) went off to a Master's program in stat at George Wash U, and has worked for a couple large federal agencies since then, including her current position at the Dept of Energy. She and beau Taylor Lewis were married early this past summer and honeymooned in Italy. Taylor is PhD student in the Joint Program in Survey Methodology at U Maryland, so "we are both stats people!"

Allison Myser (math major, '06) blew through town with her husband last month. Allison was a high school teacher in South Carolina and has now moved back to the Columbus area, teaching at Upper Arlington where she herself attended high school.

Ellen Peterson (math major, cosc minor, '06) has one year left on her post-doc at Carnegie Mellon in Pittsburgh. She worked with an undergraduate student this past summer and is teaching Real Analysis this fall.

## **ALUMNI NEWS (CONTINUED)**

**Brian Bennett** (math major, stat track, '08) is still working at GEICO in the Washington DC area, progressing through the actuarial exams slowly but surely. Last we heard, he was in study mode as he prepared to take Exam 4.

**Danny Marous (math major, '09)** got married in Columbus in July. Aaron Dugger (math major '10) and Andy Bates (math major '09) were in attendance, as was Adam Parker, who reports that while "obviously Danny had more important things to do than talk about grad school, he did say that things were going well at Johns Hopkins in his pharmacology program."

Marshall Zarecky (math major, comp minor, '09) graduated with a master's from Michigan State this year, and came back to give a talk on number theory in our departmental colloquium series this fall.

Sarah Kendrick (math major, stat track, '10) is attending University of Louisville in the MS program in biostatistics.

**Brenna Noll (math major, '10)** served for over a year as the most awesome nanny for Witt chem prof Justin Houseknecht's two kids. Then, after a few weeks back at home in PA helping her own folks a bit for the summer, she headed out to Ireland, where she's studying in a Master's program at Trinity College this year in Biodiversity and Conservation.

**Nam Vu (math major, cosc minor, '10)** chatted over the summer with former COSC director Eric Stahlberg from Helsinki, Finland, where Nam is doing research this summer in economics and econometrics, reportedly making great use of the parallel computing skills he learned here at Witt. Nam has a full ride for grad school to Vanderbilt.

#### **MAJOR NEWS**

Ernie Albert Heyder (comp major, math major, '13), a proud member of Beta Theta Pi, worked for Steven Bogaerts over the summer to help create new teaching material for parallel programming. Ernie completed a paper titled "Refining the Parallel Prefix Sum Algorithm." You can find more information at the following link on the MCURCSM 2011 site: http://personal.denison.edu/~lalla/MCURCSM2011/11.pdf

**Jon Pozderac (math minor, '12)** worked at MIT's Lincoln Laboratory in Lexington Massachusetts where he worked on multiple radars including the testing of a system capable of "seeing" through walls. Here is a story about it through MIT news, there are a lot of other websites where it got a lot of attention if you just search for "MIT sees through walls" or something to that effect. <u>http://web.mit.edu/newsoffice/2011/ll-seeing-through-walls-1018.html</u>

**Deanna Fink (comp sci major, '12)** worked at the Center for Cyberspace Research at the Air Force Institute of Technology at Wright Patterson Air Force Base. She translated code from Java to C++ for a program called Latent Dirichlet Allocation Self-Organizing Map (LDASOM). The LDASOM program uses LDA techniques to "read" and categorize documents. Using that information, it creates a SOM that allows users to see how documents are related and know what documents are most closely related to a particular topic. LDASOM already speeds up what is a VERY slow and labor intensive process, if done by hand. But it still takes hours or days to scan the number of documents normally used. The hope was that using C++ instead of Java (a slower language) would make the process even faster. The project is interesting because it tries to balance the accuracy and experience of a human with the speed of a computer.

Alaina Engdahl (cosc minor '13) participated in a REU program with the University of Michigan College of Pharmacy doing bioinformatics research. She calculated ligand efficiencies for over 3000 protein-ligand complexes to determine the role of electrostatic interactions in the reaction in which ligands bind to proteins.

**David Rea** (math major '12) will be working at an inner city college prep program as a teacher, mentor, tutor, and administrative assistant (essentially whatever they need from him) in Cleveland where the students pay for their education by working 5 times a month. The school is called St. Martin de Porres and gives students of modest means a chance for a good education that they normally would not be able to receive in Cleveland City public schools.

#### **Considering a Donation ?**

If you would like to make a donation to the math department, you can make a donation to the "MATH DEPARTMENT GIFT FUND" at

The Wittenberg Fund Wittenberg University PO Box 720 Springfield, Ohio 45504-0720

Make sure to designate your donation to the math department. Your gifts help support undergraduate research, travel, and the general mission of the department. We appreciate all of your help.



#### **WELCOME!**

The department would like to welcome all of our new majors and minors that have declared during the spring. We're happy to have you in the department!

# Mathematics Majors:

Rebecca Agnor '14 — Reynoldsburg, OH Alexis Byers '15 — Northfield, OH Beau Carson '14 — Bridgeville, PA
Rachel Evans '14 — Gates Mills, OH Skylar Folkens '15 — Cincinnati, OH Hannah Fournier '14 — Dayton, OH Lisa Garcia '14 — Springfield, OH
Victor Glasgo '15 — Williamsburg, OH Clay Hill '14 — Grove City, OH
Emilie Larned '14 — Traverse City, MI Victoria Miller '14 — Akron, OH
Rachel Ross '14 — Westerville, OH Claire Shannon '13 Cincinnati, OH Kreig Spahn '15 — Meadville, PA
Andrew Stylski '14 — Bay Village, OH

#### Mathematics Minors:

Andrew Franjesevic '14 —Uniontown, OH Ryan Hagen '12 —Grand Island, NY Jeremy Massengele '13 — Huber Heights, OH James Neyhouse '12 —Beavercreek, OH Tuan Nguyen '12 —Ba Ria, Vietnam Seth Parker '12 — Degraff, OH Jon Pozderac '12 — Mt. Vernon, OH Xiao Shou '12 — Shanghai, China **Computer Science Majors:** Andre Harvey '15, — Springfield, OH Eric Mann '14 — Swanton, OH **Statistics Minor:** Danielle Walerius '12 — Loveland, OH

# Computational Science Minors:

Andrew Franjesevic, '14, — Uniontown ,OH Sven Isaacson '13, — Dalton, OH

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