



SAS® Student Ambassadors 2012





The SAS Student Ambassador competition is designed to recognize and support student researchers who use SAS technologies in innovative ways to benefit their respective industries and fields of study.

The following SAS Student Ambassadors will present their projects at SAS Global Forum 2012 in Orlando, Florida, on April 22–25.

sas.com/ambassador

Philippe Baecke



Paper Title: *Including the Salesperson Effect in Purchasing Behavior Models Using PROC GLIMMIX*

Philippe Baecke has been using SAS for five years, and holds both Base SAS and advanced SAS programming certifications. Philippe said, "I am really convinced of the advantages of SAS software. It is able to handle very large data sets and is the most user-friendly data mining tool."

Philippe's SAS Global Forum 2012 paper explores how augmenting CRM models (traditionally based on individual customer information) with what he terms the "salesperson effect" using PROC GLIMMIX can significantly improve customer purchasing predictions. In his exploration of CRM modeling using SAS/STAT®, Philippe has learned that the PROC GLIMMIX procedure can also be coded as a starting example to incorporate other massively categorical variables, such as neighborhood variables (zip codes).

Philippe has published papers in A1 journals and presented at several conferences in Europe and North America. He supports courses at Ghent University, where students are not only taught SAS skills but also how to use them in a business environment. "Receiving the opportunity to become a SAS Student Ambassador and being able to present at SAS Global Forum 2012 is an acknowledgement of my work."

Country of Origin: Belgium

School: Ghent University

Degree Pursuing: PhD in Business Economics

Estimated Graduation Date: June 2012

Aaron Daniels



Paper Title: *A Week in the Life: A Visual Analysis of Internet Use by School-Age Students*

As a high school senior, **Aaron Daniels** looks forward to representing a new population at SAS Global Forum 2012 and providing insight from a new point of view.

Aaron's paper for SAS Global Forum 2012 (co-developed by classmate Jacob Warwick) was a study on teenagers and their use of the Internet for social media and other uses. The study provides insight into usage both inside and outside of the classroom. All students at Cary Academy have tablet PC's and certain sites are blocked during school hours.

SAS was used to analyze more than 16 million rows of data. Findings indicated that Internet usage was twice as frequent outside of school and that this increase was observed mostly in upper school students, with middle school students showing only a small increase. The study concluded that technology was not being overused to the point of causing a lack of focus in the classroom and that blocking certain sites is likely one reason for this.

Upon graduating from high school, Aaron intends to pursue a college degree in mechanical engineering. Regarding his selection as a SAS Student Ambassador, Aaron said, "The opportunity to conduct research in general excites me, so I am ecstatic to be able to share my research with other SAS users at SAS Global Forum."

Country of Origin: United States

School: Cary Academy

Degree Pursuing: High School Diploma

Estimated Graduation Date: May 2012

Patrick Hall



Paper Titles: *A Guide for Connecting Java to SAS® Data Sets* and *Let the Data Paint the Picture: Data-Driven, Interactive and Animated Visualizations Using SAS®, Java and the Processing Graphics Library*

A SAS Certified Advanced Programmer for SAS®9, **Patrick Hall** is passionate about analytics. For SAS Global Forum 2012, Patrick (along with fellow presenter Ryan Snyder) introduces a technique to leverage the strengths of Base SAS combined with Java - resulting in a savings of both development and processing time.

Having been published in the *Journal of Medicinal Chemistry*, Patrick appreciates the opportunity to attend SAS Global Forum and interact with SAS professionals from around the world. He is particularly interested in SAS' advances in high-performance computing and applications of SAS® Enterprise Miner™ in credit risk analytics.

"I feel the exposure to such wide-ranging and cutting-edge technologies showcased at SAS Global Forum will have profound, positive effects on my career development," said Patrick. "I am also excited to share the analytical visualization technique outlined in my paper."

Country of Origin: United States

School: North Carolina State University

Degree Pursuing: MS in Analytics

Estimated Graduation Date: May 2012

Manoj Kumar Immadi



Paper Title: *Kass Adjustments in Decision Trees on Binary/Interval Target*

Originally from India, **Manoj Immadi** has extensively used SAS products during his studies at Oklahoma State University's joint certification program with SAS. He has earned both the base and advanced programmer certifications from SAS in addition to being a SAS Certified Predictive Modeler Using SAS Enterprise Miner 6.1.

Manoj's paper for SAS Global Forum 2012 explores different real-time settings for decision tree modeling in SAS Enterprise Miner that are generally not explored in day-to-day usage. His paper provides insights to Kass adjustments and Bonferroni correction in decision trees.

"I believe earning a SAS Student Ambassadorship is a major achievement. As a SAS Student Ambassador, I can act as a bridge between SAS products and fellow students. Also, I will get exposure to new coding techniques, analysis techniques and new SAS applications as well as other SAS professionals with whom I can share current business analytics practices."

Country of Origin: India

School: Oklahoma State University

Degree Pursuing: MS in Management Information Systems

Estimated Graduation Date: May 2012



Dr. Lori L. Miller

Paper Title: *Using SAS® PROC MIXED to Fit Health Policy-Based Hierarchical Models*

Dr. Lori Miller's paper for SAS Global Forum 2012 contributes to the health care industry by providing an evidence-based methodology for assessing effects of school health policy requirements on childhood physical activity and health outcomes.

Lori explains that her innovative discovery “took place in an environment where the use of SAS technologies is not the norm (the field of nursing science). Additionally, at both the Betty Irene Moore School of Nursing, University of California Davis Medical Center [where Lori is a postdoctoral fellow] and the University of Washington [where she earned her PhD in nursing science], the use of SPSS is the norm for statistical data analysis.

“Being featured and recognized before an international audience as a SAS Student Ambassador affords beneficial opportunities to interact with and inspire SAS users from every industry and sector to use SAS technologies in innovative ways,” said Lori. Her current plans include conducting a short workshop on using SAS for her peers at the Betty Irene Moore School of Nursing, as they feel it will be very beneficial to their work.

Country of Origin: United States

School: University of Washington

Degree Pursued: PhD in Nursing Science

Estimated Graduation Date: Recent Graduate



Merlande Petit-Bois

Paper Title: *A SAS® Macro for Computing Point Estimates and Confidence Intervals of Effect Sizes Associated with Mediation Analysis*

Merlande Petit-Bois was first introduced to SAS in 2007 for a statistics class in her master's in education curriculum and instruction program at the University of South Florida (USF). She earned her master's with a 3.8 GPA. She continues her studies in this area as she pursues a PhD (with an impressive 3.95 GPA).

Merlande's paper for SAS Global Forum 2012 builds on previous work involving simulation and mediation analysis. SAS/IML® is used for the macro that computes the point estimates and confidence intervals for the effect sizes. SAS is also used in the last part of the project for the simulation study that uses bootstrapping sampling. She said, “I consider myself a daily ambassador for SAS as I use SAS in my coursework and in my research.

“I believe that becoming a SAS Student Ambassador is a unique opportunity,” said Merlande. She is thrilled with this honor and looks forward to being “a part of a global conference that can so enrich my journey as a doctoral student.”

She is becoming a seasoned conference presenter as well. Her fourth presentation for the American Evaluation Association's annual conference was this past November in Anaheim, California. In addition to having presented at two American Educational Research Association conferences, she presented at the 2011 SouthEast SAS Users Group (SESUG) Conference.

Country of Origin: United States

School: University of South Florida

Degree Pursuing: PhD in Measurement and Research

Estimated Graduation Date: December 2012

Zubair Shaik



Paper Title: *SAS® Since 1976: An Application of Text Mining to Reveal Trends*

Indian native **Zubair Shaik** was first introduced to SAS while pursuing his master's degree at Oklahoma State University. He said, "I was impressed by the various algorithms available in SAS and the way it handles huge data sets to produce reliable numbers for decision makers."

Zubair is an accomplished SAS user and holds several SAS certifications. Also, in June 2011, Zubair won first place at the Walmart Analytics Expo with a poster titled "Application of GetTweet Macro and Cluster Analysis to Analyze Sentiments Expressed About Walmart and Sam's Club in Tweets."

He has continued to experiment with SAS and further his SAS knowledge, a result of which is his paper for SAS Global Forum 2012. Zubair explained, "This project can be used by any industry which has a requirement to identify trends or major concepts from huge data sets."

He said, "Being a SAS Student Ambassador expands horizons of opportunity for me as well as builds self-respect and gives a confidence that all my work has paid off. It gives me additional courage to continue implementing SAS in innovative ways. I consider this my best achievement to date."

Country of Origin: India

School: Oklahoma State University

Degree Pursued: MS in Management Information Systems

Graduation Date: December 2011

Ryan Snyder



Paper Titles: *A Guide for Connecting Java to SAS® Data Sets* and *Let the Data Paint the Picture: Data-Driven, Interactive and Animated Visualizations Using SAS®, Java and the Processing Graphics Library*

With a background in programming and computational theory, **Ryan Snyder** first learned about SAS in 2007. He now holds SAS certifications in base and advanced programming as well as predictive modeling using SAS Enterprise Miner.

Ryan is co-presenting at SAS Global Forum 2012 with fellow SAS Student Ambassador Patrick Hall. Their paper describes step-by-step examples for how to access SAS data sets from Java. Ryan said, "Any Java programmer could use this information, but I think college students and teachers might be especially interested."

Regarding having earned a SAS Student Ambassadorship, Ryan said, "It's an honor to be selected. This is my first time presenting at a technical conference. Becoming a SAS Student Ambassador is a great way to exercise my technical skills combined with my ability to communicate well."

Upon graduation, Ryan is hoping to pursue a career in analytics, possibly in consulting. "Earning the title of SAS Student Ambassador demonstrates to potential employers that I have technical savvy in addition to other valuable career skills," Ryan explained.

Country of Origin: United States

School: North Carolina State University

Degree Pursuing: MS in Analytics

Estimated Graduation Date: May 2012

Ning Song



Paper Title: *Investigating Host Plant Resistance to Aphid Feeding Through SAS® Text Miner*

Ning Song earned her bachelor's degree in 2007 at Shangdong Normal University in China. She then enrolled at Oklahoma State University, where she graduated with her first master's degree in biochemistry and molecular biology in 2010.

Having been introduced to SAS at an international biological sciences conference, Ning became fascinated with the power of SAS and is now pursuing her second master's degree in management information systems. She is presenting her research, where she used SAS Text Miner to investigate host plant resistance to aphid feeding, at SAS Global Forum 2012.

Ning's career goal is to build connections between biological science and business analytics. She said, "I believe being a SAS Student Ambassador is a great opportunity for me to prepare myself for the future. I understand the huge potential in applying SAS into the science research area.

"I am very excited to present at SAS Global Forum 2012 as a SAS Student Ambassador. Firstly, I get a better chance to share my work with fellow SAS users. Secondly, this is an amazing networking opportunity," said Ning. "Thirdly, it is the best chance to catch up on the most current trends in the field and get inspired and encouraged."

Country of Origin: China

School: Oklahoma State University

Degree Pursuing: MS in Management Information Systems

Estimated Graduation Date: July 2012

Jacob Warwick



Paper Title: *A Week in the Life: A Visual Analysis of Internet Use by School-Age Students*

Jacob Warwick's paper (co-developed by classmate Aaron Daniels) for SAS Global Forum 2012 addresses a hot-button issue in education, one-to-one (1:1) computing. Cary Academy is one of the few schools to give each student a computer in the form of a tablet. Schools have a difficult time assessing 1:1 computer programs due to both the massive statistical unreliability inherent in student and faculty populations, and traditionalist teachers who can be unwilling to incorporate technology into their classrooms. Because of its unique Internet monitoring efforts, Cary Academy provides an ideal method of collecting more empirical, objective data, allowing new conclusions to be drawn about the effectiveness, usefulness and success of 1:1 computing efforts.

Jacob said, "I truly believe in the power of work that can be done with analytics." He hopes to work during this summer break furthering his SAS knowledge. Additionally, Jacob runs a nonprofit organization called Lenses Without Limits, through which he teaches photography to low-income students. "I am excited for the incredible opportunity to interact with professionals who use SAS to understand and change the world," said Jacob. "To experience SAS Global Forum as a SAS Student Ambassador is an absolute dream. After having worked on SAS products for three summers, I would love to be able to interact with the diverse wealth of users from the government, business and nonprofit sectors alike, who use SAS software in new, fascinating ways to solve our world's most pressing problems."

Country of Origin: United States

School: Cary Academy

Degree Pursuing: High School Diploma

Estimated Graduation Date: May 2012



Yi-Fang Wu

Paper Title: *How Test Length and Sample Size Have an Impact on the Standard Errors for IRT True Score Equating: Integrating SAS[®] and Other Software*

Yi-Fang Wu earned her bachelor degrees in elementary education and English as a foreign language from National University of Tainan in Taiwan. A few years later, she graduated from the same university with a master's degree in educational measurement and statistics. Yi-Fang is currently pursuing a PhD at the University of Iowa, where her grade point average is 4.0.

Yi-Fang is a seasoned conference presenter having done eight presentations in Asia (Japan and Taiwan) and the Americas (US and Canada). She has been published in two journals: *Journal of Education Research and Development*, as well as *Psychological Testing*.

First introduced to SAS in 2009, Yi-Fang says, "I pushed myself hard in learning SAS since I had so much fun with it in the beginning. I find the flexibility and utility of SAS to be amazing." Of SAS' products, she is most familiar with Base SAS, SAS/STAT, SAS/GRAPH[®] and SAS/IML.

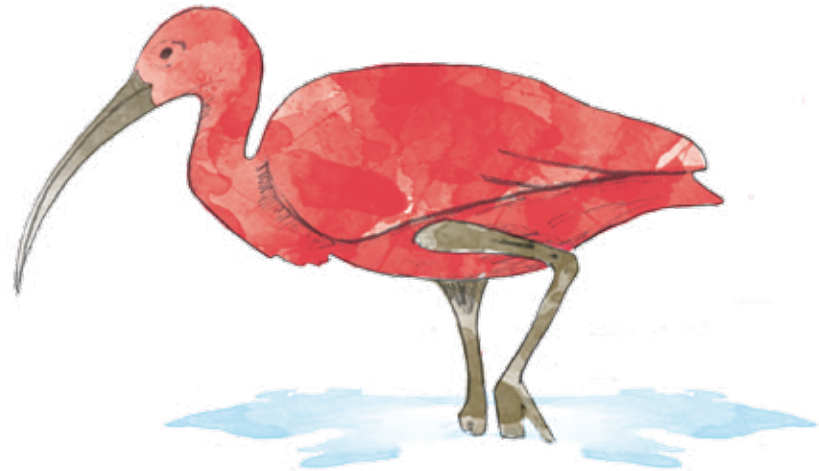
"It is a remarkable honor to attend SAS Global Forum 2012 as a SAS Student Ambassador," said Yi-Fang. "I believe it is an excellent opportunity to meet great SAS users and discover innovative SAS usages. I can't wait for learning the latest SAS updates and tips, and I know my SAS programming ability will be improved significantly by attending a SAS conference."

Country of Origin: Taiwan

School: University of Iowa

Degree Pursuing: PhD in Educational Measurement and Statistics

Estimated Graduation Date: December 2012



SAS Student Ambassador – Honorable Mentions

The following individuals have been awarded an Honorable Mention for this year's SAS Student Ambassador Program.



Michael Faron

Paper Title: *Easily Add Significance Testing to Your Market Basket Analysis in SAS® Enterprise Miner™*

Country of Origin: United States

School: Oklahoma State University

Degree Pursued: Graduate Certificate, Data Mining and Analytics

Graduation Date: December 2011



Hector Rodriguez

Paper Title: *Using SAS® to Measure Airport Connectivity: An Application of Weighted Betweenness Centrality for the FAA National Plan of Integrated Airport Systems (NPIAS)*

Country of Origin: Spain

School: University of Las Palmas de Gran Canaria

Degree Pursuing: BS in Computer Engineering

Estimated Graduation Date: September 2012



Akkarapol Sa-ngasoongsong

Paper Title: *Variable Selection for Multivariate Cointegrated Time Series Prediction with PROC VARCLUS in SAS® Enterprise Miner™ 7.1*

Country of Origin: United States

School: Oklahoma State University

Degree Pursuing: PhD in Industrial Engineering and Management

Estimated Graduation Date: May 2013



Yogen Shah

Paper Title: *Use of Cutoff and SAS® Code Nodes in SAS® Enterprise Miner™ to Determine Appropriate Probability Cutoff Point for Decision Making with Binary Target Models*

Country of Origin: United States

School: Oklahoma State University

Degree Pursued: MS in Management Information Systems

Graduation Date: December 2011

SAS Student Ambassador – Honorable Mentions

The following individuals have been awarded an Honorable Mention for this year's SAS Student Ambassador Program.



Anurag Srivastava

Paper Title: *Measuring Consumer Involvement Profiles as a Second-Order Construct Using SAS® PROC CALIS*

Country of Origin: India
School: Shanti Business School
Degree Pursuing: Post-Graduate Diploma in Management
Estimated Graduation Date: April 2012



Sumit Sukhwani

Paper Title: *Analysis of Clickstream Data Using SAS®*

Country of Origin: United States
School: Oklahoma State University
Degree Pursued: MS in Management Information Systems
Graduation Date: December 2011



Vincent Wang

Paper Title: *Comparing Stock Returns Forecasting Methods Using SAS®*

Country of Origin: United States
School: University of Arizona
Degree Pursued: MS in Finance
Graduation Date: December 2011



JuYin Helen Wong

Paper Title: *Using PHREG for Model Selection to Explore the Time Taking Immigrants in the GB to Find First Employment and Cross Validating Frailty Terms*

Country of Origin: Canada
School: University of Manchester
Degree Pursued: PhD in Social Change
Graduation Date: September 2011

SAS® Student Ambassador Program

Earn the opportunity to present your project at SAS® Global Forum

SAS Student Ambassador Benefits

- Have expenses paid to attend SAS Global Forum.
- Recognition before an international SAS audience.
- Interact with SAS users from every industry and sector.
- Gain the unique title of SAS Student Ambassador – a true résumé or CV differentiator!

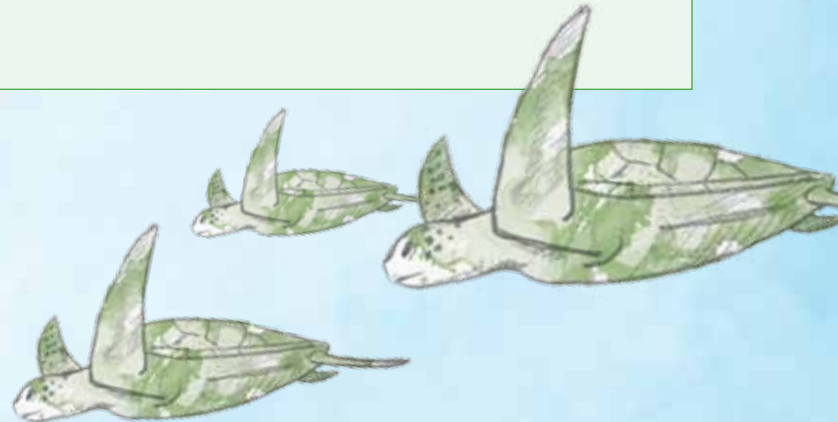
SAS Student Ambassador Application Process

There is a two-part application process:

- Submit an abstract and a working draft of your project to SAS Global Forum. (Call for papers generally opens in the summer, and the deadline to submit is usually in mid-September.)
- Complete the online SAS Student Ambassador Program Application.

After completing the application process, SAS Global Forum leaders indicate which papers merit acceptance for presentation. Once that has happened, the SAS Student Ambassador Program assesses the eligible papers and notifies the winners.

Read this year's winning papers, find out more about the program and apply at: sas.com/ambassador





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