





#### Winter 2020 Meeting Announcement

## PhilaSUG WINTER 2020 MEETING Wednesday March 18, 2020

The Philadelphia Area SAS Users Group Winter Meeting will be on Wednesday March 18, 2020, at 1:00 PM, and will be hosted by K3-Innovations at the Penn State Great Valley Campus, main building, room 126/127. A map, detailed driving, and parking instructions are available later in the newsletter.

PhilaSUG meeting and membership registration will begin at 12:15 P.M. The meeting will commence at 1 PM. Membership for the year is \$30. All meetings are free for members, full time students. As a courtesy for hosting this meeting employees of our host will have their fees for this meeting waived. We accept cash, check (made out to "PhilaSUG"), or credit/debit card (this charge will show up on your credit/debit card statement as paid to "Michael Davis / PhilaSUG"). Receipts will be available at registration time.

PhilaSUG is aware of the problem that students face to attend professional meetings on limited budgets. Show your current student ID at the registration desk and this meeting will be free. We hope that students will take advantage of this offer to enhance their knowledge of SAS software and to network with local fellow SAS users.

Agenda	We thank our host for providing lunch and break refreshments.								
12:15-1:00	Registration and lunch								
1:00-1:10	Kajal Anandani – Opening Remarks								
1:10-2:00	David Horvath – UNIX X Command Tips and Tricks								
2:00-2:30	Alex Ginev – SAS Macro for Target Value Optimization of Standardized Test Items								
2:30-2:50	Jonas Bilenas – Using the %SCAN Function								
2:50-3:05	Break, and Refreshments								
3:05-3:55	Mark Keintz – History Carried Forward, Future Carried Back: Mixing Time Series of Differing Frequencies								
3:55-4:05	David Horvath – Wildcarding in Where Clauses								
4:05-4:35	Alex Chaplin –Using SAS, Excel, Share- Point and Autosys to Automatically Update Excel								
4:35-4:55	Open Forum and Prizes								

The presenters and the PhilaSUG Executive Committee will adjourn for dinner at a nearby restaurant when the meeting concludes. You are invited to join us. The location will be announced at the meeting.



<u>Important</u> - In order to expedite entrance and to help us obtain a better food count we are asking all attendees, even those comped to please complete the required <u>Meeting Attendee</u> Sign-up Form by March 16<sup>th</sup>. It

is not necessary to bring proof of attendance sign-up (i.e., printed ticket or via cell phone app) as we will have a list containing the names of everyone that RSVP'd, at the check-in table.

#### PhilaSUG Executive Committee

Michael Davis, President Kajal Tahiliani, Secretary

George Laskaris, Membership Chairman

Amos Odeleye, Treasurer

Robert Schechter, Newsletter Editor, and Web Master

Jonas V. BilenasMax ChernyBarry CohenDiane FooseDavid HorvathMark KeintzSteve RhoadesHaibin Shu

## **E-mail Announcements**



PhilaSUG-L is a low volume, announcement-only e-mail notification service provided free of charge to all members who wish to subscribe. In order to sign up for this service, you need only send a blank e-mail message to:

PhilaSUG-L+subscribe@groups.io. Note that you can subscribe as many times with as many different e-mail addresses as you wish to have the e-mail sent to; e.g., home and office.

## **Host Sites Wanted**

We continuously seek host sites for future PhilaSUG meetings. There is not a lot of work involved, and it is a great way to put your company on the local SAS map. We need your help with this. If your company would like to host a meeting, within reasonable geographic proximity to Philadelphia, PhilaSUG would be grateful if you would contact Michael Davis at michael.davis@alumni.duke.edu.

#### **Presenters Wanted**

PhilaSUG seeks individuals who wish to participate actively in our meetings by presenting various SAS topics in the form of delivered papers or posters. This is a great way to share your knowledge with others, to brush up your presentation prior to delivery at a regional or national SAS conference, and to gain confidence as a speaker. If this is of interest to you, please use the online abstract submission form found on our website. Presentations can be from a 10-minute "coder's corner" to 50 minutes.

## What Are We Missing?

Has PhilaSUG overlooked a topic of interest to you? Do you know of a presenter that you'd like to see at PhilaSUG? Even if you are not ready to submit your own presentation (and PhilaSUG is always ready for first-time presenters), let us know what we're missing. Send a note with your suggestion to the Executive Committee, Exec.Comm@PhilaSUG.org.

#### PhilaSUG Web Site

Our site on the World Wide Web always contains the latest information concerning upcoming meetings, SAS training and seminars, links to SAS related hot topics, and local SAS job opportunities.



Visit us regularly at: <a href="http://www.PhilaSUG.org">http://www.PhilaSUG.org</a>

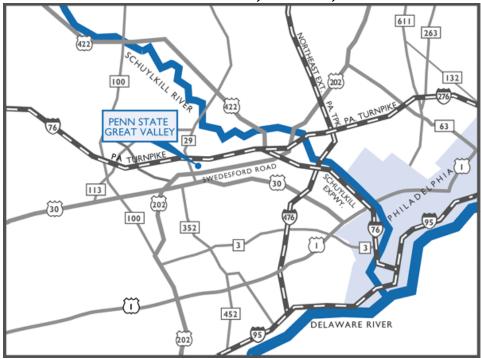
#### Snow Closing Information

 $T_0$ check for cancellations. check www.Cancellations.com after 10 AM on the day of the meeting for any last minute cancellation notices. In the "Search for Cancellations" section, you only need to enter "PhilaSUG" in the "Org Name:" box and click on the Search button. Ιf the next screen "PhilaSUG (Philadelphia Area SAS User Group)

No decision has been made yet to cancel the PhilaSUG March 18, 2020 Meeting" the meeting still on!

## **Directions to Meeting Site**

### Penn State Great Valley 30 E. Swedesford Road, Malvern, PA 19355



#### **Parking**

There is ample free parking in front of both buildings. Parking registration is not required for conference attendees. We will be meeting in the main building, Room 126/127.

#### From West Chester, Delaware, and South:

- 1. Take Route 202 North to the Great Valley Exit (Route 29 North).
- 2. Turn right at the end of the ramp and turn right again at the light onto Route 29 North.
- 3. Continue to the next traffic light and turn right onto Swedesford Road.
- 4. Continue approximately 2/10s of a mile to the Penn State Great Valley campus on the right.
- 5. As you enter the driveway into the campus, the Main Building is on the right, and the Conference Center Building is on the left.

#### From New Jersey and East

- 1. Take the Pennsylvania Turnpike westbound to Exit 326 (old Exit 24) at Valley Forge.
- 2. Follow signs for Route 202 South/West Chester Exit 328 (old Exit 26A).
- 3. Continue on Route 202 South to the Great Valley Exit (Route 29 North).

- 4. At the first traffic light, turn left onto Swedesford Road.
- 5. Then take the first left turn into the Penn State Great Valley campus.
- 6. As you enter the driveway into the campus, the Main Building is on the right, and the Conference Center Building is on the left.

#### From Reading and West

- 1. Take the Pennsylvania Turnpike eastbound to Exit 326 (old Exit 24) at Valley Forge.
- 2. Follow signs for Route 202 South/West Chester Exit 328 (old Exit 26A).
- 3. Continue on Route 202 South to the Great Valley Exit (Route 29 North).
- 4. At the first traffic light, turn left onto Swedesford Road.
- 5. Then take the first left turn into the Penn State Great Valley campus.
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## **About Our Host**

## Future Meetings and Events

# K3-INN VATIONS THINK DIFFERENT

K3-Innovations has extensive experience in Designing, Analyzing & Reporting clinical studies across a broad range of therapeutic areas supported by team of highly experienced professional. If you're looking for a highly experienced team to work directly with you on biostatistics and data management, then take a closer look at K3. We work as an extension of your team, ensuring that your clinical study stays on track.

### Thank You

The PhilaSUG Executive Committee wishes to thank Anil Mogha and Kajal Anandani at K3-Innovations, for arranging the meeting space, and refreshments. In addition, we wish to thank three members of our Executive Committee, Kajal Tahiliani and Haibin Shu for site coordination, and Jonas Bilenas for program coordination.



#### SAS® Global Forum 2020

Where: Washington, DC

**When**: March 29 - April 1, 2020

Meeting Facility: Walter E. Washington Convention

Center

## **Paper Abstracts**

## UNIX X Command Tips and Tricks

David Horvath

SAS<sup>®</sup> provides the ability to execute operating system level commands from within your SAS code – generically known as the "X Command". This session explores the various commands, the advantages and disadvantages of each, and their alternatives. The focus is on UNIX/Linux but much of the same applies to Windows as well. Under SAS EG, any issued commands execute on the SAS engine, not necessarily on the PC.

- X
- %sysexec
- Call system
- Systask command
- Filename pipe
- &SYSRC
- Waitfor

Alternatives will also be addressed – how to handle when NOXCMD is the default for your installation, saving results, and error checking.

David is an IT Professional who has worked with SAS, off and on, since the late 1980's using it as a data processing (4GL/ETL) and analysis tool. He has presented at PhilaSUG, other user groups, and organizations (workshops and seminars) in Australia, France, the US, Canada, and Oxford England (about the British Author Nevil Shute). His Masters is in Organizational Dynamics from UPENN, and he currently works for a regional bank in Risk Analytics Infrastructure at the Wilmington DE location. He has several books to his credit (none SAS-related) and is an Adjunct Instructor covering IT topics.

## Wildcarding in Where Clauses

David Horvath

There is wildcarding allowed within where clause like expressions by using special characters. But if you want to search for those specific characters, you have to override them. If you forget to escape the character, you'll get unexpected matches.

#### Topics include:

- proc sql; select x from y where x like %a/\_b escape/;
- \_ matches 1 character
- % matches any characters
- / escapes the next character (says next is actual character, not special meaning)
- set sorted\_ddl (obs=max where=(name like '%/\_ORD%' escape '/'));





#### SAS® Macro for Target Value Optimization of Standardized Test Items

Alex Ginev, The College Board

How do you find the "best" sample of SAT test items given target criteria from analyzed results? This presentation is based on recent work at The College Board using SAS macros to identify and output the sample of SAT test items "closest" to target values derived from the real data. The selection process is a narrow-down search algorithm based on one or several distance, or ratio measures. These measures are calculated. compared, and selected dynamically using nested %do-%end and %do-%unitl loops with macro selfcalls, as well as various macro functions and conditional logic. This programming task is based on Item Response Theory (IRT) and methodology and utilizes sets of item probability distributions (as 3-parameter logistic functions).

Alex Ginev gained some experience with creating and updating complex SAS macros for adverse events reporting and analysis in large clinical studies. He recently started working as a "Research Statistician I" at The College Board - Yardley located in Newtown, PA. He has an MS in Applied Statistics from West Chester University, PA and a MS in Geosciences from Sofia University, Bulgaria. He has also earned a number of SAS certifications, including; SAS 9 Base and Advanced Programmer, SAS 9 Certified Statistical Analyst with ANOVA, Linear and Logistic Regression. He is also certified (secondary) professional educator in the State of PA.

#### Using the %SCAN function

Jonas Bilenas, Banking Industry SME

The SAS® macro %SCAN function is useful to process a string of values separated by spaces or commas, scanning in each value one at a time. Once the value is processed the next value is selected until all values are exhausted. An interesting application that will be reviewed is how to automatically rename all lower case SAS variable names into upper case in a SAS data set. The second application will show you how to break huge SGSCATTER PLOTS into mutliple plots using %SCAN and other tricks.

Jonas Bilenas has been using SAS for more than 33 years in the field of Consumer Risk Management. He has presented at many local, Regional, and International User Groups and is currently active in the PhilaSUG Executive Committee. He has also authored the SAS Press Book titled, "The POWER of PROC FORMAT."





## Using SAS<sup>®</sup>, Excel, SharePoint and Autosys to Automatically Update Excel Pivot Charts in a Secure Location

Alex Chaplin, Bank of America

Get out of the grind of manually running SAS code to update an Excel pivot chart along with manually posting the file to a shared location and sending out the email notification the file is available.

Leverage the power of SAS and Excel to automatically update a pivot chart. Use SAS email features to post the file to SharePoint and send out an email notification. Use autosys to automatically run the process daily and learn how to minimize the need to make code changes when the email notification list changes.

Alex Chaplin has been using SAS® since 2007. He is a SAS Certified Base and Advanced SAS Programmer. Alex has over 25 years of experience in Information Technology working a range of roles from programmer to technical project manager across a range of industries including travel, manufacturing, chemical, retail and financial in the UK, Spain and the US.



#### History Carried Forward, Future Carried Back: Mixing Time Series of Differing Frequencies

Mark Keintz, Wharton Research Data Services

Many programming tasks require merging time series of varying frequency. For instance, you might have three data sets (YEAR, QTR, and MONTH), each with eponymous frequency and sorted by common ID and DATE variables. Producing a monthly file with the most recent quarterly and yearly data is a hierarchical last-observation-carried-forward (LOCF) task. Or, you might have three irregular times series (ADMISSIONS, SERVICES, TESTRESULTS), from which you want the latest data from each source at every date encountered (event-based LOCF). These tasks are often poorly optimized by SQL-based languages, where row order is ignored while optimizing table manipulation.

This presentation shows how to use conditional SET statements in the SAS® DATA step to update specific portions of the program data vector (i.e. the YEAR and/or QTR variables) to carry forward low frequency data to multiple subsequent high frequency records. A similar approach works just as well for carrying forward data from irregular time series. We also show how to use "sentinel variables" as a means of controlling how long data is carried forward; that is, how to remove historical data that has become "stale." Finally, we demonstrate how to modify these techniques to carry future observations backward, without resorting data.

Mark Keintz has been using SAS® since it was documented in one book. Mark's current programming interests are in financial research applications and large data sets. He has previously served on NIH Small Business Innovation Research review panels and directed research computing support for demography and sociology studies. Mark's primary SAS® expertise is in DATA step programming, Hash programming techniques, efficient use of large data sets, and macro programming.



## Philadelphia Area SAS User Group (Phila *SUG*) Membership Form

If you haven't submitted an attendance form, or already paid this year's dues, then to speed through registration complete this form (please print) and return it to the registration desk of any PhilaSUG meeting (do **NOT** mail it). Checks should be made payable to PhilaSUG. Our membership year runs from Jan. 1 to Dec. 31. Dues for the year are \$30. As a courtesy for hosting this meeting, employees of K3\_innovations are welcome to attend this meeting at no cost. Current full-time students, showing a student ID are also welcome to attend this meeting at no cost. An attached business card helps legibility and is appreciated.

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