Personal Details

Name	Philip Andrew Mason
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Date of birth	28th June 1964

Major Career highlights

- Creating innovative new techniques to integrate SAS Stored Processes with JavaScript and HTML objects.
- Rewrite over 100 Customer Intelligence strategies from SAS Marketing Automation (Customer Intelligence Studio) using Base SAS, enabling removal of that costly, complex SAS product.
- Debugging and tuning of a complex Marketing Automation system on a SAS Grid platform.
- Tuning SAS code processing billions of rows of Big Data to achieve huge reductions in run times, using Tesco Club Card data.
- SAS Business Intelligence tools & JavaScript based system framework for running Risk Management models and viewing results.
- SAS Stored Process & JavaScript based system for analysing Animal Health Experiment data.
- Metadata based system for outputting complex graph/table layouts to EXCEL and PDF.
- Generalised software test automation system for Intervet (Merck Animal Health)
- Designed/built the UK government's Census Management Information System to track pay & returns for the 2011 Census.
- Designed and built a system used by testers to extensively test the code for hundreds of derived variables
- Designed and built a complex web-based Medical Monitoring system utilising SAS B.I. tools on Solaris and JavaScript.
- Author of the revised edition of the book "In the Know – SAS Tips & Techniques from around the globe". Updated for SAS 9 and published early 2007.
- Worked on evaluation, installation, configuration, design & implementation of very large web-enabled SAS 9 system using their Business Intelligence architecture – integrating with Java and Oracle.
- Designed architecture for a large commercial analytical SAS system, making use of a parallel processing architecture
- Designed and built several data warehouses and Management Information Systems
- Designed & built Information & Data Entry systems for the Pharmaceutical Industry.
- Carried out reviews and tuning on various large SAS applications
- Provided technical lead and project management on several large SAS projects
- Presenting many papers at SAS conferences in the USA, Europe & Australia (1989-2003)
- Won various SAS industry and user group awards
- Invited to speak at International SAS conferences many times
- Author of the book "In the Know – SAS Tips & Techniques from around the globe" (1997)
- Wrote the "Advanced Macro Programming" course for SAS Institute.
- Developed and ran a training programme to train people to proficiency in SAS

Skills

SAS Software	Versions: 6.12, 8.2, 9.1.3, 9.2, 9.3, 9.4 Areas: Base, Stored Processes, Stored Process Web Application, AF, Graph, Macros, SQL, Connect, Access, Share, ODS, DDE, ODBC, BI Server, Enterprise Guide, Enterprise Miner, Data Integration Studio (was ETL/Studio), OLAP Cube Studio, Information Map Studio, MDDB/Server, Enterprise Reporter, SAS/IntrNet, XML Mapper, Management Console, Web Report Studio, Web OLAP Viewer, SAS Portal, SAS/ETS, SAS/STAT, SAS/FSP, SAS/Studio, SAS/Visual Analytics, SAS University Edition, Graphics Template Language, SAS/Studio
Microsoft Software	Word, Excel, PowerPoint, Visio, FrontPage, OneNote, Outlook, Publisher, Project, vbScript, VBA, SharePoint, Communicator, SQL/Server
Other Software	Sencha Architect, Beyond Compare, Notepad++, Emacs, OmniGraffle, OmniPlan, Apple Keynote/Pages/Numbers
Operating Systems	Windows 95, 98, NT, 2000, XP, Vista, Server 2003/2008, Windows 7, 8 & 10 IBM - MVS Linux Unix – AIX, Solaris & Tru64 Mac OS X iOS
Hardware	PCs Macs SUN & IBM mid-range IBM mainframes iPhones, iPads & Android tablets
Other	HTML, JavaScript, extJS, jQuery, Flash, D3, DC SAS analysis & programming (31 years) Business Analysis Design & architecting of systems Project Management, Mentoring & Team Leading Documentation Training Customer Liaison & Stakeholder Management Clinical Trial Processes CDISC - SDTM
Industry experience	Pharmaceutical Animal Health Banking Insurance Debt Management Commodity Trading Utilities – Gas Telecommunications Airline Government Marketing Retail

Memberships

Current	SAS UK Customer Success Advisory Board
Past	VIEWS committee, International SAS user group (Founder & 13 years) PHARMASUG (international Pharmaceutical SAS Users Group) committee (2 years) SEUGI (SAS European Users Group International) committee (5 years) SMUG (SAS Melbourne Users Group) committee (co-founder & 3 years) SUGI (SAS Users Group International) committee (4 years)

Training taken

SAS Courses	SAS® in Hadoop: Techniques for In-Memory Analytics and In-Database DS2 Processing (2016)
	SAS Consultants Briefing covering Integration Technologies & ODS
	OLAP, Application development with SAS/AF & Frame
	Computer Performance Evaluation
	SAS Macro Programming
	SAS Fundamentals/Programming
	Update to version 6 from version 5
Conferences	SAS software user groups (every year) SAS Global Forum, UK SAS Forum, SUGA, SUGI, VIEWS, SEUGI, PHARMASUG (1985-2016)
	Computer Measurement Group CMGA & UKCMG Conferences (1986-1993, 2007-2008)
Management Courses	Presentation skills
	Communication & team building
	Negotiation
	Problem Solving
	Total Quality Management
	Project planning
	Time management
Other	Terradata Basics (2016)
	Various courses taken at clients as required training

Summary of companies worked for

All positions were done as contracts, except for the ones marked in yellow.

Lloyds Banking Group, Halifax, England	June 2015 - now
Cabot Financial, Kent, England	Oct 2013 – April 2015
Dunnhumby (Tesco Club Card), London, England	Jan 2013 – Oct 2013
Lloyds Banking Group, Halifax, England	Aug 2012 – Dec 2012
Intervet (Merck Animal Health), Netherlands	Sep 2010 - Aug 2012
National Statistics, Newport, Wales	Feb 2010 – Jan 2011

Astellas Pharmaceuticals, Netherlands	Aug 2007 – Jan 2010
National Statistics, Newport, Wales	Apr 2004 – Jun 2007
HandsOn-BI, USA	Mar 2005
M & G (part of Prudential), London, England	Jan 2004 – Mar 2004
Department of Work & Pensions, London, England	Jun 2003 – Oct 2003
PPD Development, Cambridge, England	Aug 2002 – Mar 2003
Oxford Pharmaceutical Services, Wallingford, England	Jul 2002, Apr-Jun 2002, Sep-Nov 2001, Jun-Jul 2001
SAS Institute USA (San Francisco, Chicago, New York, Washington)	May 2002
SAS Institute, Marlow, England	Dec 2001-Mar2002
SAS Institute, Sydney, Austraila	Apr 2002
NRMA, Sydney, Australia	Apr 2002
AAMI, Melbourne, Austraila	Mar 2002
Allied Irish Bank, Dublin, Ireland	Sep 2001
Motorola, Swindon, England	Jul 2000-May 2001
Fortis Bank / Generale Bank, Brussels, Belgium	Jan 1997-Jul 2000
NMHI / AXA, Melbourne, Australia	Sep 1995- Dec 1998
Sabena, Brussels, Belgium	May-Jun 1997
Janssen / J&J, Turnout, Belgium	Dec 1996-Feb 1997, Mar-Jun 1996, Nov 1994
British Gas, Staines, England	Jun-Jul 1996
Telstra / Telecom, Melbourne, Australia	Apr 1994-Sep 1995, Feb-Nov 1992
Euroclear, Brussels, Belgium	Jan-Dec 1993
ANZ Bank, Melbourne, Australia	Jan 1990-Dec 1991
Coles Myer, Melbourne, Australia	Apr 1985-Dec 1989

Summary of training courses written and delivered

SAS Tips & Techniques	• PSI UK, November 2006 • NESUG, Portland, USA (September 2005) • BASUG, Boston, USA (November 2004) • NESUG, Washington, USA (September 2003) • PPD (March 2003) • NESUG, Buffalo, USA (September 2002) • SEUGI 1999 • SAS Australia 1998 • Holland 1998 • Belgium 1998 • England 1997
Advanced Macro Programming	• MWSUG in Indianapolis, USA (October 2002) • San Francisco, Chicago, New York & Washington (May 2002) • Melbourne & Sydney (Apr 2002)
SAS Reporting including Report, Graphics, ODS, Data Step, Tabulate	• NESUG, Baltimore, USA (November 2004) • NESUG, Washington, USA (September 2003) • PPD (November 2002)

SAS Accelerated Learning	• PPD (January 2003)
Advanced ODS	• NESUG, Portland, USA (September 2005) • NESUG, Baltimore, USA (November 2004) • NESUG, Washington, USA (September 2003) • PPD (March 2003)
Advanced Graphics	• Pharmasug 2007, Denver • NESUG, Washington, USA (September 2003) • PPD (March 2003)
SAS Efficient Programming	• Delivered at various companies over 11 years
SAS SQL Programming	• Delivered at various companies last 11 years
Customised Training covering various topics	• Federal Reserve Bank, New York (September 2005)
SAS Stored Processes	• Cabot Financial (2015)
Macro Programming	• Cabot Financial (2015)

Summary of papers written & delivered

Data Vizualisation using SAS Stored Processes with HTML & JavaScript	SAS Global Forum, Las Vegas, April 2016
SAS Tips & Techniques	SAS UK Forum, June 2015
SAS Stored Processes for creating great visualisations	SAS UK Forum, June 2015
Developing Web Applications with SAS Stored Processes	SAS UK Forum, June 2014
Developing Web Applications with SAS Stored Processes (invited paper)	SAS Global Forum, Washington, March 2014
Building web based applications using SAS Stored Processes	SAS UK Forum, July 2012
Building web applications using Stored Processes with JavaScript & Flash	SAS Global Forum 2011
"Building Interactive Web Applications using Stored Processes"	SAS Global Forum 2009
"SAS 9 Tips & Techniques"	UKCMG June 2007
"SAS 9 Tips & Techniques Workshop"	NESUG 2006
"Leveraging the WIK with SAS Enterprise Guide" winner of Best Contributed Paper in the Systems Architecture section	SUGI 2005
"Customising ODS output for Microsoft Word using DDE"	Pharmasug 2003 & VIEWS 2003
"SAS Tips I learnt whilst at Oxford"	SUGI 2001, Pharmasug 2002 & VIEWS 2001
"Introduction to SAS/Graph"	SUGI 1999, SUGI 2001 & Pharmasug 2002
Various SAS tips papers	SEUGI 1996, 1997 SUGI 1996 VIEWS 1996, 1997, 1998, 1999, 2000
"A collection of SAS tips"	SUGA 95
"Functional Billing"	UKCMG 1993, LEGENT 1991 & CMGA 1991
"Using SAS to add value to management reporting"	SUGA 90
"Chargeout Methodologies"	CMGA 1992
"Adding value to management reporting"	CMGA 1990
"SMF basics"	CMGA 1989
"Using MICF for management reporting"	Legent 1989

Career Details

Lloyds Banking Group

SAS Consultant (June 2015 – present)
- Creating, prototyping and building SAS solutions to support team and project work.
- Working on team designing and implementing the loading of new data sources into the LeMans platform using DI Studio.

Cabot Financial

SAS Consultant (August 2013 – April 2015)
- Investigation, debugging & resolution of many problems with SAS Marketing Automation.
- Creation of utility programs using SAS Stored Processes to help understand and resolve errors with scheduled flows.
- Review of the SAS usage by all users in company & proposal of ways to improve Return on Investment. Interviewed users, analysed systems & wrote report.
- Project to enable strategies to be moved from CI Studio to Base SAS.
    - Proposal and Prototype of a solution
    - Design of architecture and coding guidelines
    - Technical lead of SAS coding for team
    - Creation of various utilities related to running of strategies
    - Training of team in various SAS techniques
    - Creation of core macros used throughout system.
- Design and build of a prototype dashboard for visualising the flow of accounts through the business and modelling change. Many different stored processes built which produced advanced visualisations using HTML and javaScript objects.

Dunnhumby

Analytics SAS Consultant (January 2013 – August 2013)
- Conversion and improvement of SAS algorithms written by analysts into production SAS code to run on WPS (a SAS code compatible system)
- Delivery of the first personalisation product for Tesco.
- Tuning of SAS code taking excessive amounts of time to reduce run time by using a range of techniques including implementing a parallel code execution system.
- Regularly working with programs processing Big Data (many billions of rows of data).
- Typically reducing run times from tens or hours to a few by implementing parallel processing using SAS based techniques.
- Advice, guidance & training for team of SAS analysts with respect to SAS programming techniques.

Lloyds Banking Group

SAS Consultant (August 2012 – December 2012)
- Build a complex javaScript based User Interface using the Sencha extJS javaScript framework.
- Write SAS Stored Processes to prepare data and provide it to the components of the User Interface.
- Integrate the use of SAS Business Intelligence tools into the User Interface, such as Web Report Studio reports, Information Delivery Portal and Cubes.

Intervet (Merck Animal Health), Boxmeer, Netherlands

Principle Programmer for SAS Development Team (September 2010 - August 2012)
- Design & Build an automated software test system for SAS software
- Design & Build a metadata based system for creating complex graph & table layouts in EXCEL.
- Working on a complex web application using SAS Stored Processes, HTML & JavaScript (ExtJS) to deliver a framework for processing assay data through a range of complex

algorithms.
- Reengineering Visual Basic programs/applications to SAS/JavaScript based applications to carry out the same functionality in a validated system.

Design and Build Census Management Information System using web interface driving SAS National Statistics, Newport Wales & Titchfield England

Data Architect/Programmer for SAS Development Team (February 2010-August 2010)
- Convert SIR code to SAS code, including program to translate the code
- Design & Build complex testing system for use by testers via web interface
- Design and Build Census Management Information System using web interface driving SAS Stored Processes.

Astellas Pharamaceuticals, Leiderdorp, Netherlands

Senior Clinical Programmer (August 2007-January 2010)
- Design and build a large web based Medical Monitoring system using SAS 9.1.3 on Solaris, making use of customised Javascript, HTML & RTF.
- Design and build several smaller web based systems such as study overview system, cost tracking system and others.
- Training and mentoring of junior programmers
- Administration support of the SAS Business Intelligence system, including strategic advice
- Prototyping and experimentation with many techniques involving web based SAS using stored processes, including creation of some innovative ways to do things not usually possible with SAS.

National Statistics, Newport, Wales

Joint Technical Lead for SAS Development Team (June 2004-June 2007)
- Design generalised framework to enable stored processes to automatically run in parallel
- Research & evaluate SAS 9 and produce recommendations on architecture and use in Statistical Modernisation Project (SMP).
- Consult with various groups across the organisation offering expert advice on the capabilities and use of SAS
- Design SAS systems architecture as part of a large Java/Oracle/SAS based re-engineering of National Statistics processes
- Build generic components for use in the global architecture
- Install & configure SAS 9 on various machines.
- Build SAS 9 prototypes and tools for use by various groups.
- Build environment implementing java interface to stored processes running on SAS 9 servers.
- Train & mentor other SAS programmers
- Design and write a complex formula parser which implements a generic formula evaluation system for National Accounts.
- Design/write small systems to improve the resolution of defects including various log analysis tools and testing systems.
- Tune large complex SAS 9 application to achieve major performance improvements
- Wrote system to automatically produce documentation of complex macro driven programs.

SAS Analyst/Programmer (April 2004-June 2004)
- Design and construction of a client/server GUI for loading survey data, analysing and reporting.

Australian Tax Office (February 2007)

- Presented SAS 9 architectural talk and guidance to their internal Analytics group.

HandsOn-BI, USA

SAS Data Mining Consultant (March 2005)

- Provided independent evaluation of SAS Enterprise Miner for Oracle Corporation
- Built a range of models

M & G, London

SAS Consultant (January 2004-March 2004)
- Rewrite SAS marketing programs to use a new database.
- Write & implement a change control system for SAS software.
- Extraction of data from Oracle into SAS.
- Tuning of SAS processing
- Provide some training and guidance to other SAS programmers

Department of Work & Pensions

SAS Consultant (June 2003-October 2003)
- Extensive and complex SAS programming for a micro-simulation model written in SAS. Adding new routines and making changes to the complex analytical model.

Wood Street Consultants Ltd.

Author (June 2002 - December 2003)
- Writing & updating a suite of SAS training courses to be presented in the US & UK
  - "SAS tips & techniques"
  - "Pharmaceuticals for SAS programmers"
  - "SAS Reporting"
  - "Advanced ODS & Advanced Graphics"
  - "Clinical Trials for SAS programmers"
  - "Advanced Graphics"
  - "SAS Macro Programming"

SAS Institute, Books By Users

Author (2003-present)
- Writing a revised edition of my book "In the Know: SAS Tips & Techniques from around the Globe". Is being updated for version 9.1 of SAS

NESUG regional SAS conference - Washington, USA

Trainer (3 days September 2003)
- Presented 3x1 day courses
  - SAS Tips & Techniques
  - SAS Reporting
  - Advanced SAS Graphics & Advanced ODS

PHARMASUG regional SAS conference - Miami, USA

Trainer (1 day May 2003)
- Presented 1 day course about SAS Tips & Techniques

PPD Development - Cambridge, England

SAS Consultant & SAS/Pharmaceutical Course Author/Trainer (August-March 2003)
- Project manage development of a 6 month Graduate Training programme to train recent graduates as Biostatistician Programmers
- Review existing SAS training material, modifying and supplementing as required
- Write SAS courses
  - SAS Reporting course – covering ODS, SAS/Graph, Data Step, Proc Report, etc.
  - Accelerated SAS training – covered many areas for experienced programmers including SQL
  - Advanced ODS course

- Advanced Graphics course
- SAS version 8 update seminar
- SAS certification preparation and revision course
- Provide support to team of experienced SAS programmers
  - Help desk function, answering questions & prototyping solutions
  - Outlined solutions for SAS related process problems – e.g. change control, automated log/list/program management, etc.
- Write some pharmaceutical industry training
  - Many presentations about Standard Operating Procedures & Working Practices
  - Introduction to the Pharmaceutical Industry
  - An extensive Dummy Study which involved application of clinical trial techniques to study data – combined practical SAS skills with practical clinical trial skills

NESUG regional SAS conference - Buffalo, USA

Trainer (2 days Sep 2002)
- Presented 1 day course about Advanced Macro Programming techniques
- Presented 1 day course about SAS Tips & Techniques

MWSUG regional SAS conference - Indianapolis, USA

Trainer (1 day Aug 2002)
- Presented 1 day course about Advanced Macro Programming techniques

Oxford Pharmaceutical Services - Wallingford, Oxfordshire, England

SAS Consultant (July 2002)
- Wrote SAS programs to produce a series of tables and listings for a Clinical Trial.

SAS Institute -USA

Trainer (8 days during May 2002)
- Presented 1 day course about Advanced Macro Programming techniques in San Francisco, Chicago, New York and Rockville (Washington).

Oxford Pharmaceutical Services - Wallingford, Oxfordshire, England

SAS Consultant (April – June 2002)
- Extended functionality of a Pharmaceutical Data Entry/Management System for use by CROs. Added support for multiple concurrent users.

SAS Institute - Melbourne & Sydney Australia

Trainer (10th & 12th April 2002)
- Presented 1 day on-site course about Advanced Macro Programming techniques.

NRMA - Sydney, New South Wales, Australia

Trainer (9th April 2002)
- Presented 1 day on-site course about Advanced Macro Programming techniques.

A.A.M.I. (Insurance) - Melbourne, Victoria, Australia

SAS Data Warehousing Consultant (March 2002)
- Evaluated SAS technology used in the current data warehouse and make recommendations for improvements and future directions.

SAS Software Limited - Marlow, Buckinghamshire, England

SAS Consultant (December 2001–March 2002)
- Write the official SAS course titled "Advanced SAS Macro Programming"

Oxford Pharmaceutical Services - Wallingford, Oxfordshire, England

SAS Consultant (September–November 2001)
- Extended functionality of a Pharmaceutical Data Entry/Management System for use by CROs

Allied Irish Bank - Dublin, Ireland

SAS Consultant (September 2001)
- Conducted many interviews and wrote proposal for an Enterprise Data Warehouse

Oxford Pharmaceutical Services - Wallingford, Oxfordshire, England

SAS Consultant (June-July 2001)
- Created Data Entry System for use by CROs in Pharmaceutical Trials
- Documented system and trained users

Motorola - Swindon, England

SAS Consultant (July 2000-May 2001)
- R&D for new parallel processing architecture for an existing commercial SAS application
- Ported a large application from Solaris to Windows
- Upgraded a large application from SAS 6.12 to SAS 8.1
- Investigate, prototype, evaluate and recommend various new technologies from SAS

Fortis Bank (formerly Generale Bank) - Brussels, Belgium

SAS Consultant (1997-July 2000)
- Design & develop change control system
- Develop programming standards & guidelines
- Design & develop a complex GUI for a Risk Management System
- Tune existing SAS systems and advise programmers

AXA (formerly National Mutual Health Insurance) - Melbourne , Australia

SAS Consultant (September 1995-1998)
- Design & develop a health insurance data warehouse
- Design & develop a Management Information System
- Provided development services and support for over a year from England to staff in Australia

Sabena Airlines - Brussels, Belgium

SAS Consultant (May-June 1997)
- Designed & implemented a large multi-dimensional data warehouse
- Built an MIS

Janssen Pharmacuticals - Turnhout, Belgium

SAS Consultant (December 1996-February 1997)
- Upgraded part of pharmaceutical information system from SAS 6.08 to 6.11, making use of new functionality
- Defined and documented SAS data validation guidelines
- Developed general purpose utility to export SAS data to other PC applications

British Gas - Staines, England

SAS Consultant (June-July 1996)
- Built GUI to run a series of SAS macros producing reports

Janssen Pharmacuticals - Turnhout, Belgium

SAS Consultant (March-June 1996)
- Designed and coded several modules for a pharmaceutical information system which produced a range of reports using complex parameters
- Wrote programming guidelines and validation procedures for SAS coding team

Telstra (formerly Telecom Australia) - Melbourne, Australia

SAS Consultant (April 1994-September 1995)
- Carried out hundreds of adhoc requests involving writing SAS code to report from a range of SAS databases
- Wrote and presented SAS efficient programming & SQL courses
- Produced daily SAS coding tips which were distributed to people inside and outside Telstra
- Wrote a range of utilities for exploiting existing data sources

Janssen Pharmacuticals - Turnhout, Belgium

SAS Consultant (November 1994)
- Produced a number of modules for a pharmaceutical information system which enabled interactive production of graphs, tables & listings

Morgan Bank Euroclear - Brussels, Belgium

SAS Consultant (January-December 1993)
- Wrote a system for software promotion between development environments
- Wrote an EIS for senior management
- Tuned LAN SAS applications resulting in huge performance gains

Telstra (Telecom Australia) - Melbourne, Australia

SAS Consultant (February-November 1992)
- Modified an MXG based billing system
- Wrote a regional reporting system
- Created the Telecom Online Enquiry System which was an advanced query tool for financial information

ANZ Bank - Melbourne, Australia

Information Technology Consultant (January 1990-December 1991)
- Designed and produced a functional billing system which calculated costs of business functions
- Produced complex one page financial analysis reports
- Designed and produced a network availability system
- Wrote dataset I/O analysis program which was published in MXG

Coles Myer[1] - Melbourne, Australia

SAS Analyst Programmer (April 1985-December 1989)
- Many performance & tuning related projects
- Worked on many capacity plans

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[1] The largest retailer in Australia owning department stores, discount stores, supermarkets, etc.