

Curriculum Vitae

(Updated: 2011.08.11)

Name Bijoy Joseph
Nationality Indian
Year of birth 1968
Marital status Married

Position(s):

Regular:

1. **Senior Researcher**,
Indic Society for education and development (INSEED),
1, Swami Enterprises Complex, Tigrania road,
Nashik - 422011, Maharashtra, India.
Email: bijoy.joseph@inseed.org
http://www.inseed.org/
2. **Database and Information Systems Coordinator**,
Jan Swasthya Sahyog (JSS),
P.O. Ganiyari - 495112, Bilaspur,
Chhattisgarh, India.
http://www.jssbilaspur.org/

Ancillary:

1. Consultant and Member of the Board of Directors,
Akra-Numero Research and Consultancy Centre,
Vellikulangara, Thrissur - 680693,
Kerala, India.
http://www.akra-numero.com/
2. Adjunct faculty (from February 2009),
Department of Statistics,
Manipal University,
Manipal - 576104, Karnataka, India
http://www.manipal.edu/

Academic record

1. B.Sc. (Geology) 1988 - Christ College, University of Calicut, Kerala, India
2. M.Sc. (Geology) 1991 - Department of Geology, University of Pune, India
3. Ph.D. (Geology) 1999 - Department of Geology, University of Pune, India

Title of the Ph.D. Thesis: *Sustainability of Shallow Deccan Basaltic Ground Water Systems of the Shindawane Watershed, Haveli Taluka, Pune District, Maharashtra.*

Awards: CSIR-UGC Research Fellowship, 1991, from the University Grants Commission, New Delhi, India

Memberships

1. Life member of the Indian Society for Medical Statistics (ISMS).
<http://www.isms-india.com/>

Experience

1. Data management, statistical computing and other programming

Period	Organisation	Nature of work
2011/04-2011/09, 2010/04-2010/09, 2009/04-2009/09	Department of Vaccines, National Institute for Health and Welfare, Finland	Database design in PostgreSQL, automated wiki updates from R, and scripts to create and update local R mirror from various sources
2008/04-2008/09	Department of Nutrition, National Public Health Institute, Finland	Comparison of databases, data quality assessment and reporting using SAS
2007/04-2007/09	Department of Vaccines, National Public Health Institute, Finland	Extension of MySQL databases, data documentation, parallel computing
2007/01 -	Jan Swasthya Sahyog, P.O. Ganiyari, Bilaspur, India	Database design, data quality assessment and data management of village survey and disease data
2006/01-2007/01	IC Health Scientific Secretariat, Centre for Chronic Disease Control, New Delhi, India	Capacity building, systems analysis and network security, SAS and linux training, data management
2006/09-2006/12	Department of Vaccines, National Public Health Institute, Finland	Database schema design in MySQL, data standardisation, documentation, parallel computing
2006/05-2006/06	Hunter New England Population Health, Newcastle, NSW, Australia	Data management of crimes data, SAS programming, and computing
2000/11-2006/01	International CVD Epidemiology Unit, National Public Health Institute, Finland	1. Administration and maintenance of large data sets and databases relating to risk factor, follow-up and genotypic data 2. Preparation of SAS data sets for statistical analysis 3. Publication of data summary on the WWW using SAS

2. Research

Period	Organisation	Nature of work
2009/01 -	Collaboration with Jaydeep Nikam, Yashwantrao Chavan Maharashtra Open University, Nashik, India and Ulpu Väisänen, Geological Survey of Finland	Water and soil quality assessment, water level data collection
2008/10 -	Jan Swasthya Sahyog, P.O. Ganiyari, Bilaspur, India	Studies in nutrition and diabetes in impoverished societies
2004/11 - 2005/05	Collaboration with Dr. Shalabh, Department of Mathematics and Statistics, Indian Institute of Technology, Kanpur, India	1. Mathematical modelling of well water level data 2. Remote sensing data
1999/10 - 1999/12	Department of Engineering Geology and Geophysics, Helsinki University of Technology, Espoo, Finland	Fracture zones and hard rock research
1997/08 - 1997/11	Department of Geology, University of Helsinki, Finland	Statistical analysis of fracture zones

3. Consultancy

Period	Organisation	Nature of Work
2006/12 -	Datapharm Australia Pty Ltd	Analysis of clinical trial data
2005/03 -	Akra-Numero Research and Consultancy Centre Pvt. Ltd., India	Data management, systems set-up
2004/10 -	Sugar and food industry based in Finland	1. Analysis of data on gingivitis 2. Analysis of GI tract data 3. Analysis of clinical trial data

4. Training

Period	Organisation	Nature of Work
2000/01 - 2000/09	Ztango com Oy, Espoo, Finland	Training of mobile service providers (GSM) in the use and configuration of telecommunications software for SMS and WAP

Workshops organised/delivered

1. International workshop on *Data management and Statistics Training* organised by Initiative for Cardiovascular Health Research in the Developing Countries (IC Health), 22-24 March, 2006, New Delhi, India.
2. Workshop on *Bayesian statistics using OpenBUGS and R* organised by INSEED, 10-14 December 2007, YCMOU, Nashik, Maharashtra, India.
3. International workshop on *Statistical Models and Practices in Epidemiology* organised by INSEED, 24-28 November 2008, Manipal University, Manipal, Karnataka, India.
4. International workshop on *Bayesian statistics using OpenBUGS and R* organised by INSEED, 08-12 December 2008, St. Thomas College, Pala, Kerala, India.
5. Delivered a workshop on *Statistical Analysis System: workshop for beginners* at Manipal University, Karnataka, India, during 25-26 February 2009.
6. International workshop on *Statistical methods in Epidemiology, Sample size consideration in Epidemiology and Longitudinal data analysis* organised by INSEED, 16-24 November 2009, YCMOU, Nashik, Maharashtra, India.
7. International workshop on *Statistical methods in Epidemiology (using R)* organised by INSEED, 10-14 November 2010, Charutar Arogya Mandal, Anand, Gujarat, India.
8. International workshop on *Bayesian computation using OpenBUGS (and R)* organised by INSEED, 22-26 November 2010, Christian Medical College, Vellore, Tamil Nadu, India.

Projects undertaken

1. **Data management**
 - (a) Administration and maintenance of large data sets and databases, relating to risk factor, follow-up and genotypic data
 - (b) Quality assessment and preparation of SAS data sets for statistical analysis
 - (c) Automation of extraction of data from databases for transfer to analysis groups using SAS
 - (d) Database schema design in MySQL for infectious diseases data for a large multi-centric study

- (e) Database schema design in PostgreSQL for linking data from various national registries

2. Email archiving system

- (a) Development and maintenance of an application interface to existing mailing list software to archive emails of the MORGAM project in HTML
- (b) Automation of the email archive software and deployment of the same to other projects
- (c) Installation, administration and maintenance of Samba file server and Apache web server on Linux to facilitate the email archiving application suite
- (d) Installation of a search engine (Swish-e), and CGI scripting for web forms

3. SAS programming

- (a) Data management
- (b) Statistical computing - summary statistics, follow-up data analysis, fitting of Cox's proportional hazards model, analysis of mortality follow-up data using competing risks, testing of Hardy-Weinberg Equilibrium and Linkage Disequilibrium
- (c) Quality assessment and statistical analyses of cross-sectional and longitudinal data
- (d) Reporting and updating of quality assessment in HTML
- (e) Standardisation and linking of crimes data
- (f) Comparison of databases, data quality assessment and reporting of nutrition data

4. Protein data compilation

- (a) Automated data collection and compilation of protein function, motifs and protein-protein interaction data from the internet using UNIX tools and shell scripts

5. WHO MONICA Monograph CDs and archive CDs

- (a) Programming for the preparation of the WHO MONICA project Monograph CDs and data archive CDs

6. Parallel computing

- (a) Exploration of parallel computing possibilities using MPI (Message Passing Interface) and PVM (Parallel Virtual Machine) libraries for R and Matlab

7. Local mirror for R packages

- (a) Shell scripting for creating and updating a local R mirror. The scripts automatically downloaded packages, tested their installability and then updated the local mirror.
- (b) The script also automatically updated the documentation in the wiki, based on the results

8. Documentation

- (a) Documentation related to database schema design, statistical analyses and quality assessment of data

Technical knowledge

1. Languages

- (a) UNIX shell scripts, CGI programming - 7 years
- (b) Python and Perl, also PHP, C
- (c) SQL (Oracle RDB, PostgreSQL, MySQL) - 9 years
- (d) DCL (Digital Command Language) on VMS
- (e) Also PHP, C, Java

2. Statistical analysis and programming tools

- (a) SAS (Statistical Application Software) - 10 years
- (b) R language - 2 years

3. Operating systems

- (a) Installation and administration of UNIX-like systems, viz. FreeBSD, NetBSD, various linux distributions such as Debian, Red Hat, Slackware etc. - 7 years
- (b) OpenVMS - 10 years
- (c) Tru64/Digital Unix/Alpha, HP-UX, Sun Solaris/SunOS, AIX
- (d) Windows NT/2000/XP

4. Databases

- (a) PostgreSQL - 3 years
- (b) Oracle RDB on VAX/VMS - 9 years

5. Networking and system set-up

- (a) LAN set-up and administration experience - small networks
- (b) LDAP, SAMBA file server and Apache web server installation, configuration and maintenance
- (c) Installation and configuration of linux-based firewalls and routers and backup servers

Training and workshops attended

1. Workshop on *Social well-being and gender equity in a globalising world: Dialogue between India and Finland* organised by INSEED and The Family Federation of Finland, Helsinki, Finland from 27-28 November, 2007, Helsinki, Finland.
2. *GSM in India* - annual conference organised by the Global Mobile Suppliers Association at Bangalore, Karnataka, India, March 6-7, 2000.
3. Contact programme for *Excellence in Diagrammatics and Cartography in Earth Sciences*, Department of Geology, University of Pune, India, March 1996.
4. IGCP-264, Workshop cum Seminar on *Geological Applications of Remote Sensing with Emphasis on Spectral Properties*, sponsored jointly by UNESCO and IUGS, University of Pune, India, December 1991.
5. Training in Sedimentology, Palaeontology and Remote Sensing, at the Kesava Deva Malaviya Institute of Petroleum Exploration, Oil and Natural Gas Commission, Dehradun, India, June-July 1991.

Areas of special interest

Ground water studies, alternate sources of energy, social equality issues in Indian society, promotion of open source software

Publications

1. Kulathinal, S., Shalabh, **Joseph, B.** Analysis of pooled time series and spatial data with an application to water level data. *Journal of Applied Statistical Science*, **18**(3), 2011.
2. Prabhakaran, P., Ajay, V.S., Gottumukkala, A.K., Shrihari J.S., Snehi, U., **Joseph, B.**, Prabhakaran, D., Reddy, K.S. Global Cardiovascular Disease Research Survey. *Journal of the American College of Cardiology* **50**: 2322 - 2328, December 11, 2007.
3. Kulkarni, H., Deolankar, S.B., Lalwani, A., **Joseph, B.**, Pawar, S.D. Hydrogeological framework of the Deccan basalt groundwater systems, West-central India. *Hydrogeology Journal* **8**(4), 368-378, 2000.
4. Kulkarni, H., Deolankar, S.B., Lalwani, A., **Joseph, B.** Artificial recharge in the hard-rock area of the Deccan Basalt - an issue in paradox. National Conference on Artificial National Conference on Artificial Recharge in India, National Geophysical Research Institute, Hyderabad, India, 1998.
5. Deolankar, S.B., Kulkarni, H., Lalwani, A., Pawar, S.D., **Joseph, B.** Ground water in the Deccan basalt - a review and some suggestions toward systematic management. Irrigation Commission Seminar and Discussion (Nashik, India), 1998.

Web publications

1. Cepaitis, Z, **Joseph, B**, Niemelä, M, Saarela, O, and Kuulasmaa, K for the MORGAM Project. (July 2007). Record inventory and routine data checking. Available from: URL: <http://www.ktl.fi/publications/morgam/qa/inventory/invinf.htm>
2. Kuulasmaa, K, Niemelä, M and **Joseph, B** for the MORGAM Project. (July 2007). Description and quality of baseline data: Blood pressure. Available from: URL: <http://www.ktl.fi/publications/morgam/qa/baseline/bp/bpqa.htm>
3. Niemelä M, Kulathinal S, **Joseph, B**, Saarela, O and Kuulasmaa K for the MORGAM Project. (July 2007). Description and quality of baseline data: Height, weight, waist and hip measurements. Available from: URL: <http://www.ktl.fi/publications/morgam/qa/baseline/anthropm/anthropmqa.htm>
4. Niemelä M, Kulathinal S, **Joseph, B**, Saarela, O and Kuulasmaa K for the MORGAM Project. (July 2007). Follow-up data. Available from: URL: <http://www.ktl.fi/publications/morgam/qa/followup/followup.htm>