

## Samson B. Folarin

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CONTACT INFORMATION	800 N Loop Rd, BSB 11.330 Department of Mathematical Sci University of Texas at Dallas Richardson, TX 75080 USA	<i>Voice:</i> (682) 331-9963 <i>Fax:</i> (972) 883-6622 <i>E-mail:</i> samson.folarin@utdallas.edu <i>WWW:</i> www.utdallas.edu/math/~folarin-samson
RESEARCH INTERESTS	Scientific Computing, Uncertainty-Quantification, Computational Fluid Dynamics, Bayesian Statistics	
EDUCATION	<b>University of Texas at Dallas(UT DALLAS)</b> , Richardson, Texas USA Ph.D. Candidate, Applied Mathematics, January 2015 (expected graduation date: Dec 2019) <ul style="list-style-type: none"><li>• Dissertation Topic: “Uncertainty Quantification of Multi-Phase Porous Media Flow”</li><li>• Advisor: Prof Hejun Zhu</li><li>• Co-Advisor: Prof Ramakrishna Vishwanath</li></ul> M.S., Applied Mathematics, May 2019 <b>Federal University of Technology Akure</b> , Akure, Ondo State Nigeria M.Tech., Industrial Mathematics, June, 2012 <ul style="list-style-type: none"><li>• Dissertation Topic: Influence of Thermal Radiation On Steady Compressible Boundary Layer Flow On a Wedge.</li><li>• Advisor: Prof Felix Ilesanmi Alao</li></ul> <b>Federal University of Technology Akure</b> , Akure, Ondo State Nigeria B.Tech., Industrial Mathematics, Nov, 2007 <ul style="list-style-type: none"><li>• Dissertation Topic: Analytical and Numerical Study of Thermal Explosion in a Thick Walled Container.</li><li>• Advisor: Prof Felix Ilesanmi Alao</li></ul>	
GRANTS AND SCHOLARSHIP	Nigeria Federal Government Scholarship for Undergraduate Student, <b>2002-2007</b> . Nigeria Federal Government Scholarship for Graduate Student, <b>2010-2012</b> . Graduate Teaching Assistantship, University of Texas at Dallas, Richardson, Texas, USA, <b>2015-2019</b> . Graduate Winter Course in Geometric Partial Differential Equations and Their Approximations. Texas A & M College Station, Texas, USA. Travel Grant, <b>2015</b> Statistical and Applied Mathematical Science(Samsi), Quasi Monte Carlo and High Dimensional Sampling Methods for Applied Mathematics Workshop.North Carolina State University, Durham, North Carolina, USA Travel Grant, <b>2017</b> . Frontier Technologies for High-Dimensional Problems and Uncertainty Quantification Workshop. Johann Radon Institut(RICAM),Altenberger, Linz, Austria.Travel Grant, <b>2018</b> . Workshop on Machine Language and Control Theory. Naveen Jindal School of Management, University of Texas at Dallas, Richardson, Texas, USA. <b>2018</b> . Summer school on Mathematical and Statistical Model Uncertainty. Department of Mathematics and Statistics, Simon Fraser University,Vancouver, Canada. Travel Grant, <b>2018</b> .	

Mathematical Problem in Industry(MPI) Workshop. Harvey Mudd College, Claremont, California. Travel Grant,**2018**

Summer School:"Crash Course on Data Assimilation-Theoretical foundations and advanced applications with focus on ensemble methods". Nansen Environmental and Remote Sensing Center-NERSC, Bergen,Norway. Travel Grant,**2018**.

#### HONORS AND AWARDS

Dean list awards,student with the highest cummulative grade point average, 2002-2007 academic sections.

Best Undergraduate thesis award,Department of Mathematical Sciences,Federal University of Technology, Akure Ondo State Nigeria. 2007

Second best graduating undergraduate student,Department of Mathematical Sciences, Federal University of Technology, Akure Ondo State Nigeria. 2007.

Best graduating Graduate student,Department of Mathematical Sciences, Federal University of Technology, Akure Ondo State Nigeria. 2012.

#### ACADEMIC EXPERIENCE

**Federal University of Technology**, Akure, Ondo State Nigeria

*Assistant Lecturer*

**Jan, 2008 - July, 2014**

Co-taught undergraduate level courses for the Bachelor of Technology in Industrial Mathematics program. Shared responsibility for lectures, exams, homework assignments, and grades.

- Math 101 Advance College Algebra, first semester 2008.
- Math 103 Vector and its application in mechanics, First Semester 2008
- Stat 105 Introduction to Statistics for physical sciences, First Semester 2008
- Math 102 Differential Calculus , Second Semester 2008.
- Math 104 Integral Calculus, Second Semester 2008
- Math 201 Mathematical Method 1, First Semester 2009.
- Math 203 Differential Equation, First Semester 2009
- Math 202 Numerical Analysis 1, Second Semester 2009
- Math 204 Linear Algebra 1, Second Semester 2009
- Math 103 Vector and its application in mechanics, First Semester 2010
- Math 301 Partial Differential Equation, First Semester 2010
- Math 201 Mathematical Method 1, First Semester 2010.
- Math 302 Numerical Linear Algebra , First Semester 2010.
- Math 102 Differential Calculus, Second Semester 2010.
- Math 214 Engineering Mathematics, Second Semester 2010.
- Math 303 Abstract Algebra, First Semester 2011.
- Math 101 Advance College Algebra, First Semester 2011.
- Math 307 Combinatoric I, first semester 2011
- Stat 208 Statistical Inference I, Second Semester 2011.
- CSC 210 Introduction to Computer Programming , Second semester 2011.
- Math 201 Linear Algebra, First Semester 2012.
- Math 213 Real Analysis I, First Semester 2012.
- Math 308 Vector and Tensor Analysis, Second Semester 2012.
- Math 108 Advance College Algebra, Second Semester 2012.
- Math 211 Complex Variables, First Semester 2013
- Math 231 Metric Space Topology, First Semester 2013.
- Stat 217 Probability Theory , First Semester 2013.
- Stat 310 Distributionl Theory, Second Semester 2013.

- Math 324 Mathematical Programming, Second Semester 2013.
- Math 228 Differential Geometry, Second Semester 2013.
- Stat 402 Operation Research, Second Semester 2013.
- Math 405 Optimization Theory, First Semester 2014
- Math 407 Complex Analysis, First Semester 2014.
- Stat 222 Multivariate Statistics , Second Semester 2014.
- Math 102 Differential Calculus, Second Semester 2014.

**University of Texas at Dallas**, West Campbell Road, Richardson, Texas, USA

*Teaching Assistant*

**Jan, 2015 - Aug, 2020**

Co-taught undergraduate level courses for the Bachelor Degree. Shared responsibility for lectures, exams, homework assignments, and grades.

- **Math 2414** Integral Calculus, Spring 2015
- **Math 1306** College Algebra for non-scientist, Spring 2015
- **Math 2419** Calculus II, Summer 2015.
- **Math 2414** Calculus II, Fall 2015.
- **Math 1314** College Algebra, Fall 2015.
- **Math 2420** Differential Equation with application, Spring 2016.
- **Math 1325** Applied Calculus I, Spring 2016.
- **Math 2419** Calculus II, Summer 2016.
- **Math 2418** Linear Algebra, Fall 2016.
- **Math 1326** Applied Calculus, Fall 2016.
- **Math 2418** Linear Algebra, Spring 2017.
- **Math 2312** Precalculus, Spring 2017.
- **Webwork** Putting some linear Algebra, Calculus and some statistics problems on the webwork, summer 2017.
- **Math 2418** Linear Algebra, Fall 2017.
- **Math 2418** Linear Algebra, Spring 2018.
- **Math 1326** Applied Calculus II, Spring 2018.
- **Webwork** Putting some linear Algebra, Calculus and some statistics problems on the webwork, Summer 2018.
- **Math 2418** Linear Algebra, Fall 2018.
- **Math 2333** Vectors and their application, Fall 2018.
- **Math 2413** Differential Calculus, Spring 2019.
- **Math 2413** Linear Algebra, Fall 2018.
- **Math 2333** Vectors and their application, Fall 2018.
- **Math 2413** Differential Calculus, Spring 2019.
- **Math 2413** Differential Calculus, Fall 2019.
- **Math 2417** Calculus of Multivariables, Spring 2020.
- **Math 2413** Differential Calculus, Summer 2020.

#### PUBLICATIONS

**S.B.Folarin.** and F.I.Alao. 2011. Similarity solution of heat conduction effect on thermal ignition of a reacting material. Federal University of Technology Akure, Journal of Engineering and Engineering Technology (FUTAJEET). Vol 7, No1 pp 203-245.

**S.B.Folarin.** and O.S.Iyiola. 2013. Causality and Invertibility of Auto-regressive moving Average (ARIMA) model. Asian Journal of current Engineering and Math Vol2, No4 pp 260-266.

F.I.Alao and **S.B.Folarin.** 2013. Similarity Solution of the influence of thermal radiation and heat transfer on steady compressible boundary layer flow. Open Journal of fluid dynamics. Vol3 pp 82-85

F.I Alao and **S.B.Folarin.** 2013. Adomain approximation to thermal radiation with heat transfer effect on compressible boundary layer flow on a wedge. Ghana mining Journal. Vol 14. pp 70-77

F.I.Alao and **S.B.Folarin**. 2013. Similarity solution of free convection boundary layer flow over a vertical plate. International journal of Advances in Mechanical Engineering and Math(IJAMES). Vol2, No4, pp 99-107

O.S.Iyiola. and **S.B.Folarin**. 2014. Approximate analytical study of finger-imbibition phenomena of Time-fractional Type in Double phase flow through porous media. European Journal of pure and applied mathematics Vol7, No2, pp 210-229.

PAPERS IN  
PREPARATION

**S.B. Folarin**.Characterization of Channels Reservoirs using ensemble-based integration scheme data.

**S.B. Folarin**.Efficient History Matching using cross-over of Ensemble Kalman Filter and Ensemble Smoother for convergence analysis.

CONFERENCES AND  
WORKSHOPS  
ATTENDED

**S.B Folarin and F.I Alao.2012** .Similarity solution of thermal radiation with heat transfer effects on compressible boundary layer flow . World academy of science and Engineering Technology: International Conference on Fluid Mechanics, Heat Transfer and Thermodynamics(ICFMHTT 2012), Zurich, Switzerland, Jan, 2012.

**S.B.Folarin and F.I.Alao 2012**. Adomian approximation to thermal radiation with heat transfer effect on compressible boundary layer flow on a wedge. 2nd UMaT international minning conferences, University of Mines and Technology(UMaT), Tarkwa, Ghana, August,2012.

**S.B.Folarin and F.I.Alao,2012**. Similarity solution of free convection boundary layer flow over a vertical plate.International conference on application of fluid dynamics(ICAFD 2012);Department of Mathematics, Faculty of Science, University of Botswana, September, 2012.

Graduate Winter Course workshop in Geometric Partial Differential Equations and Their Approximations.Department of Mathematics,Texas A & M University, College Station,Texas USA Jan 10 - 16 **2015**

Statistical and Applied Mathematical Science(Samsi), Quasi Monte Carlo Workshop and High Dimensional Sampling Methods for Applied Mathematics (North Carolina State University USA).August 1,**2017**.

Frontier Technologies for High-Dimensional Problems and Uncertainty Quantification Workshop, Johann Radon institut(RICAM) (Linz,Austria). Dec 14 - 18 **2018**.

Workshop on Machine Language and Control Theory, Naveen Jindal School of Management, University of Texas at Dallas, Richardson Texas, USA. Dec 4,**2018**.

Summer school on Mathematical and Statistical Model Uncertainty,Simon Fraser University, Department of Mathematics and Statistics, Vancouver, July 23 - 27 Canada.**2018**.

The 34th Annual MPI Workshop Mathematical Problem in Industry(MPI) Workshop, Claremont Center for the Mathematical Sciences,(Claremont California). June 25 - 29,**2018**

Summer School:"Crash Course on Data Assimilation-Theoretical foundations and advanced applications with focus on ensemble methods" Nansen Environmental and Remote Sensing Center-NERSC ( Bergen Norway).May 22 - 25 **2018**.

PROFESSIONAL  
EXPERIENCE

**Zenith Bank of Nigeria**, Katsina, Katsina State Nigeria.

Advice client, gather financial information, disburse funds. keeping records of financial data records.

COMPUTER SKILLS

- Statistical Packages: R, S-Plus, BUGS; some experience with SAS; extensive use of C and Fortran statistical libraries.
- Languages: C++, Perl, Pascal, some use of Unix shell scripts, MPI parallel processing library.
- Applications: Generic Mapping Tools (GMT) - Unix mapping software, L<sup>A</sup>T<sub>E</sub>X, common Windows database, spreadsheet, and presentation software
- Algorithms: Experience programming Markov Chain Monte Carlo simulations of Bayesian posterior distributions
- Operating Systems: Unix/Linux, Windows.

REFERENCES

- Prof Rachinskiy Dmitry  
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University of Texas at Dallas  
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dmitry.rachinskiy@utdallas.edu  
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Richardson, Texas  
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- Prof Felix Alao  
Department of Mathematical sciences  
Federal University of Technology  
P.M.B 704 Akure, Ondo State, Nigeria  
felix.alao@futa.edu.ng  
+234(80)34727707
- Dr Olawale Bolaji Segun  
School of Mathematics and Physics  
University of Tasmania, Australia  
olawale.bolaji@utas.edu.au  
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