

## 1. Employment

*Professor*, Department of Mathematical Sciences, University of Alabama in Huntsville, 2012-present.

*Associate Professor*, Department of Mathematical Sciences, University of Alabama in Huntsville, 2005 - 2011.

*Assistant Professor*, Department of Mathematical Sciences, University of Alabama in Huntsville, 1999- 2004.  
*NRC Post Doctoral Research Fellow*, National Academy of Sciences, NASA Langley Research Center, Virginia, 1997 - 1999.

*Visiting Assistant Professor*, Center for Research in Scientific Computation, North Carolina State University, 1994-1997.

## 2. Education

Ph.D, Aug. 1994, Simon Fraser University, Vancouver, Canada.

M. Sc., May 1991, University of British Columbia, Vancouver, Canada.

B. Sc.(Hons), May 1987, University of Jaffna, Sri Lanka.

## 3. Visiting Positions

Visitor, ICERM, Brown University, July 2014, October 2014. Visitor, IISER, TVM, 2012. Visitor, IMA, University of Minnesota, March 2003, March 2005, August 2005, Nov. 2010, June 2015. Visitor, AIM, Palo Alto, California, December 2007. Visitor, SAMSI, RTP, North Carolina, November 2007. Visitor, MSRI, University of California, Berkeley, October 2007. Visitor, IPAM, UCLA, October 2007. Visitor, ICASE, NASA Langley Research Center, May 1997.

## 4. Awards

National Research Council (NRC) Post Doctoral Fellowship, USA, 1997–1999. University Graduate Fellowship, SFU, Vancouver, Canada, 1993/94. University President's Ph.D Dissertation Fellowship, SFU, Vancouver, Canada, 1993/94. NASA Summer Faculty Research Fellowship, 2021, 2019, 2015, 2012, 2010, 2009, 2006, 2003. UAH Individual Investigator Distinguished Researcher Award, 2014

## 5. Scientific Society Memberships

Member in Society for Industrial & Applied Mathematics (SIAM) and American Mathematical Society (AMS).

## 6. Research Interests

Applied Mathematics, Numerical analysis, Optimization and Control Theory.

## 7. Synergistic Activities

### 7.1 Advising and Mentoring Students

Supervised three Ph.D students in Applied Mathematics directly. Supervised several M.Sc students in Mathematics directly. Served as Ph.D dissertation committee member on over sixty committees. Served as M.Sc thesis committee member on over twenty committees.

### 7.2 Editorships in Professional Journals

Editor-in-Chief, Engineering Mathematics Letters, January 2012 - present

### 7.3 Conference and Symposia Organized

Organizer and chair of 36th SIAM Southeastern Atlantic Section (SEAS) conference, Huntsville, Alabama, March 24-25, 2012; Organized a total of 39 minisymposia in SIAM meetings between 1995-2015; Organized a four part session in AMS Sectional meeting in 2015; Organized a three part minisymposium in SIAM Southeast Atlantic Section meeting in 2020

### 7.4 Distinguished Speaker Lectures Organized:

*Prof. Peter Lax*, Abel Laureate, NYU, April 11, 2011; *Prof. Max D. Gunzburger*, Francis Eppes Distinguished Professor, Florida State University, February 13, 2004; *Prof. John Burns*, Hatcher Professor of

Mathematics, Virginia Tech, November 18, 2008; *Prof. Craig Tracy*, Distinguished Professor of Mathematics, UC Davis, November 16, 2012.

### 7.5 Invited presentations

Invited talks: Delivered over 60 invited talks on Numerical Methods for PDEs and PDE Constrained Optimization in various national/international conferences and colloquia between 1994-2020

Short courses: Delivered a seven hour lecture series on Stochastic Analysis and Control of Fluids in TIFR/ICES in Trivandrum, India, December 2012.

### 7.6 Selected awards and grants

2016-2018, NASA CAN research grant, Principal Investigator; 2014-2015, UAH Individual Investigator Distinguished Research Award, Principal Investigator; 2012-2013, UR II grant, Co-Principal Investigator; 2011-2012, DOD STTR grant, Co-Principal Investigator; 2011-2012, UR II grant, Co-Principal Investigator; 2006-2009, NASA research grant, Principal Investigator; 2004-2008, NSF SCREMS grant, Principal Investigator

### 7.7 National Panels

National Science Foundation (NSF) Grant Review Panelist, 2005; Department of Energy (DOE) Grant Review Panelist, 2005, 2008; NSF Graduate Research Fellowship Program Panel 2014, 2016, 2017, 2018, 2019, 2020

### 7.6 Recent Publications

- S.S. Ravindran, "Penalization of Dirichlet Boundary Control for Nonstationary Magneto-hydrodynamics", **SIAM Journal on Control and Optimization (SICON)**, Vol. 58(4), pp. 2354-2382, 2020.
- S.S. Ravindran, "Analysis of the Stabilized Crank-Nicolson Time Stepping Scheme for the Diffusive Peterlin Viscoelastic model", **Numerical Functional Analysis Optimization**, Volume 41:13, pp. 1611-1641, 2020
- S.S. Ravindran, "An Efficient Long-Time Stable Second-Order Accurate Time-Stepping Scheme for Evolutionary Magneto-Micropolar Flows", **Computers and Mathematics with Applications**, Volume 79(5), 2020, pp. 1302-1320.
- S.S. Ravindran, "An Efficient Second Order in Time Scheme for MHD System with Temperature Coefficients", **IMA Journal of Numerical Analysis**, Volume 39, Issue 4, October 2019, pp. 1860-1887.
- S.S. Ravindran, "Analysis of a decoupled time-stepping algorithm for reduced MHD system modeling magneto-convection", **Numerical Methods for Partial Differential Equations**, Volume 34(6), pp. 1953-197, 2018
- S.S. Ravindran, "An Adaptive Approach for Prediction of Propellant Feedline Dynamics in Fluid Network", **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 28(6), pp. 1335-1351, 2018.
- S.S. Ravindran, "Finite Element Approximation of Dirichlet Control Using Boundary Penalty Method for Unsteady Navier-Stokes Equations", **ESAIM: M<sup>2</sup>AN**, Volume 51(3), pp. 825-849, 2017.
- S.S. Ravindran, "An Extrapolated Second Order Backward Difference Time-Stepping Scheme for Magneto-hydrodynamic System", **Numerical Functional Analysis and Optimization**, Volume 37(8), pp. 990-1020, 2016.
- S.S. Ravindran, "A Second-Order Backward Difference Time-Stepping Scheme for Penalized Navier-Stokes Equations Modeling Filtration Through Porous Media", **Numerical Methods for Partial Differential Equations**, Volume 32(2), pp. 681-705, 2016.
- S.S. Ravindran, "Dirichlet Control of Unsteady Navier-Stokes type System related to Soret Convection by Boundary Penalty Method", **ESAIM: Control, Optimisation and Calculus of Variations**, Vol. 20, pp. 840-863, 2014.