SHIHCHUNG CHIANG

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Department of Finance
Chung Hua University
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EMPLOYMENT HISTORY:

Aug. 2013~ present   **Associate Professor**,
    Dept. of Finance,
    College of Management, Chung Hua University

Aug. 2012~ July 2014   **Chairperson**,
    Continuing Education Program in Management,
    College of Management, Chung Hua University

Feb. 2012~July 2012   **Associate Executive Director**,
    College of Management AACSB Accreditation,
    Chung Hua University

Aug. 2010~ July 2013   **Associate Professor**,
    Dept. of Applied Statistics,
    College of Management, Chung Hua University

Sep. 1996~ July 2010   **Associate Professor**,
    Dept. of Applied Mathematics,
    College of Engineering, Chung Hua University

Feb. 2008~ July 2009   **Chairperson**,
    Dept. of Applied Mathematics,
    College of Engineering, Chung Hua University

Sep. 2005~ Jan. 2008   **Associate Professor**,
     Dept. of Applied Mathematics,
    College of Science, National Chiao Tung University

July 1996~ Aug. 1996   **Visiting Professor**,
    Dept. of Mathematics,
    College of Science, TungHai University

EDUCATION:

Ph. D., Department of Mathematics,
Virginia Polytechnic Institute and State University
Blacksburg, Virginia
Advisor: Terry L. Herdman
Graduation: May, 1996

Master of Science, Department of Mathematics,
Virginia Polytechnic Institute and State University
(VPI, or Virginia Tech), Blacksburg, Virginia
Graduation: December, 1991

Master of Science, Department of Aerospace and Ocean
Engineering, Virginia Polytechnic Institute and State
University (VPI, or Virginia Tech), Blacksburg,
Virginia
Graduation: December, 1989

HONORS / AFFILIATIONS:

Reviewer, NCS Annual Conference, October, 2017

Reviewer, Journal of Advances in Mathematics and Computer
Science, September, 2017

Reviewer, British Journal of Mathematics and Computer
Science, April, 2017

Reviewer, Asian Journal of Mathematics and Computer
Research, May, 2016

Life-time Member,
TWSIAM,
2016~present

Life-time Member,
Taiwan Finance Association,
2015~present

AACSB Accreditation Committee member,
College of Management, Chung Hua University
Sept. 2010~ July 2014

Editor, International Journal of Innovative Advances in
Science and Technological Research ,
Sept. 2009~present

Life-time Member,
The Mathematical Society of the Republic of China,
2008~present

Reviewer, International Journal for Numerical Methods in
Engineering, May, 2006

Best paper in session, SIAM student Conference, Clemson
University, South Carolina, March 28, 1996

Dr. C. B. Ling Scholarship (Virginia Tech), 1996

RESEARCH INTERESTS:

- Mathematical Finance
- Optimal Control
- Integro-Differential Equations
- Computational Sciences

TEACHING INTERESTS:

- Mathematical Finance
- Mathematics in Management
- Optimization
- Numerical Methods

PROFESSIONAL ACTIVITIES:

Presentation: *Numerical Algorithms for Solving Optimal
Control Problems with Integro-Differential Equations of the*

Second Kind as Constraints, Nov, 10, 2018. The 8th Workshop on Boundary Element Method and Boundary Integral Equation Method in Taiwan, I-Shou University, Kaohsiung, Taiwan

Presentation: *Full-Discretized Numerical Methods for Solving a Class of Integro-Differential Equations of the First Kind* Dec, 14~15, 2017. NCS 2017, National Dong Hwa University, Hualien, Taiwan

Presentation: *Numerical Algorithms for Solving Optimal Control Problems with Integro-Differential Equations of the Second Kind as Constraints,* July, 3~6, 2017. IEEE ICCA 2017, Ohrid, Macedonia

Presentation: *Numerical Methods for Solving a Class of Hybrid Weakly Singular Integro-Differential Equations,* June, 1~4, 2016. 21th International Conference Mathematical Modelling and Analysis (MMA2016), Tartu, Estonia

Presentation: *Some Mathematical Results of A Class of Integro-Differential Equations,* Sept., 24, 2015. National Cheng Kung University, Tainan, Taiwan

Presentation: *Numerical Algorithm and Its Revision for Solving A Class of Nonsingular Integro-Differential Equations of the First Kind*, August,10~14, 2015. 8th international Congress on International and Applied Mathematics, ICIAM 2015, Beijing, China

Presentation: *Numerical Algorithms for Solving One Type of Singular Integro-Differential Equation Containing Derivatives of the Time Delay States*, June, 1~3, 2015. ICCS2015, Reykjavik, Iceland

Presentation: *A Semi-Discretized Numerical Method for Solving One Type of Singular Integro-differential Equation Containing Derivatives of the Possible Delay States*, June, 10~12, 2014. ICCS2014, Cairns, Australia

Presentation: *Numerical Optimal Issues to a Class of Singular Integro-Differential Equations*, December, 12~16, 2013. ICOTA9, Taipei, Taiwan

Presentation: *Solutions to a System Containing Singular Integro-Differential Equations,* July, 22~25, 2013. WORLDCOMP'13, Las Vegas, Nevada, USA

Presentation: *Numerical Minimum Time Control to a Class of Singular Integro-Differential Equations,* May, 27~30, 2013. MMA2013 and AMOE2013, 18th International Conference Mathematical Modelling and Analysis and 4th International Conference Approximation Methods and Orthogonal Expansions, Tartu, Estonia

Presentation: *When Differentiation Meets Integration,* May, 7, 2013. Dayeh University, ChangHua, Taiwan

Presentation: *Issues of One Kind of Integro-Differential Equations,* September, 19~25, 2012. ICNAAM2012, The 10th international conference on Numerical Analysis and Applied Mathematics, Kos, Greece

Presentation: *Revised Numerical Methods for Optimal Control to a Class of Singular Integro-Differential Equations,* July, 10~14, 2012. ICNPAA2012 Congress, Vienna, Austria

Presentation: *Numerical Optimal Unbounded Control with A Singular Integro-Differential Equation as a Constraint,* July, 1~5, 2012. AIMS Conference "Dynamical Systems, Differential Equations and Applications", Orlando, Florida, USA

Presentation: *Topics of a Class of Singular Integro-Differential Equations,* March, 30, 2012. Department of Applied Mathematics, Chung Yuan University, Chung Li, Taiwan

Presentation: *Stories of a Class of Integro-Differential Equations,* November, 5, 2011. The 2nd Workshop on Boundary Element Method and Boundary Integral Equation Method in Taiwan, National Cheng Kung University, Tainan, Taiwan

Presentation: *Solutions and Numerical Optimal Issues to Neutral Singular Integro-Differential Equations,* July,18~22,

2011. 7th international Congress on International and Applied Mathematics, ICIAM 2011, Vancouver, British Columbia, Canada

Presentation: *A Semi-Discretized Numerical Scheme for the Solution of a Class of Singular Integro-Differential Equations,* March,15~18, 2011. Joint International Workshop on Trefftz Method VI and Method of Fundamental Solutions II, National Sun Yat-sen University, Kaohsiung, Taiwan

Presentation: *Solutions and Optimal Control to A Singular Integro-Differential Equation,* March, 28~31, 2010. College of Mathematics, Sichuan University, Sichuan, China

Presentation: *Solutions to a Singular Integro-differential Equation,* October, 8, 2009. Department of Applied Mathematics, National Sun Yat-sen University, Kaohsiung, Taiwan

Presentation: *Finite Memory Approximation for a Singular Neutral System,* December, 20, 2005. Department of Applied Mathematics, National Chiao Tung University, Hsinchu, Taiwan

Presentation: *Applications of MATLAB, MATHEMATICA and MAPLE in Numerical Linear Algebra,* December, 16, 2004. Dayeh University, Changhua, Taiwan

Presentation: *Numerical Methods for a Class of Singular Integro-Differential Equations,* March, 28, 1996. SIAM student Conference, Clemson University, South Carolina, USA

Presentation: *Numerical Methods for a class of Singular Integro-differential Equations,* December, 29, 1995. Department of Mathematics, National Normal University, Taipei, Taiwan

PUBLICATIONS:

蔣世中, "Full-Discretized Numerical Methods for Solving a Class of Integro-Differential Equations of the First Kind", 全國計算機會議論文集上冊, pp. 214~218, 2017

Shihchung Chiang and Terry L. Herdman, "Numerical Algorithms for Solving Optimal Control Problems with Integro-Differential Equations of the Second Kind as Constraints", IEEE Xplore, pp. 198~202, 2017

Shihchung Chiang, "Numerical Methods for Solving a Class of Hybrid Weakly Singular Integro-Differential Equations", Applied Mathematics, No. 8, pp. 956~966, 2017

Shihchung Chiang, "Numerical Algorithm and Its Revision for Solving A Class of Nonsingular Integro-Differential Equations of the First Kind", Chung Hua Journal of Computational Science, No. 6, pp. 15~23, March 2016

Shihchung Chiang, "Numerical Methods Entailing Using a Class of Weakly Singular Integro-Differential Equations of the Second Kind as the Constraint for Determining Optimal Control", International Journal of Numerical Methods and Applications, Vol.14, No.1, pp. 1~22, 2015

Shihchung Chiang and Terry L. Herdman, "Numerical Algorithms for Solving One Type of Singular Integro-Differential Equation Containing Derivatives of the Time Delay States", Applied Mathematics, Vol.6, No.8, pp. 1294~1301, 2015

Shihchung Chiang and Wei-Chun Wu, "A Numerical Method to Solve One Type of Integro-Differential Equations", Chung Hua Journal of Computational Science, No. 5, pp. 13~17, March 2015

Shihchung Chiang, "Numerical Minimum Time Control to a Class of Singular Integro-Differential Equations", Journal of Mathematics and System Science, Vol.5, No.2, pp. 72~82, February 2015

Shihchung Chiang, "A Semi-discretized Numerical Method for Solving One Type of Singular Integro-differential Equation

Containing Derivatives of the Possible Delay States", Procedia Computer Science, Vol.29, 2014, pp. 2102~2110, 2014 International Conference on Computational Science

Shihchung Chiang, "Numerical Solutions to a System Containing Singular Integro-Differential Equations", Chung Hua Journal of Computational Science, No. 4, pp. 13~17, March 2014

Shihchung Chiang, "Numerical Optimal Unbounded Control with A Singular Integro-Differential Equation as a Constraint", Discrete and Continuous Dynamical Systems, supplement 2013, pp. 129~137, November 2013

Shihchung Chiang and Terry L. Herdman, "Revised Numerical Methods for Optimal Control of a Class of Singular Integro-Differential Equations", Mathematics in Engineering, Science and Aerospace, Vol.4, No.2, pp. 171~187, 2013

Shihchung Chiang, "A Typical Prototype System of Integro-Differential Equations from Aeroelasticity Problem and an Approach to the System Solution", Chung Hua Journal of Computational Science, No.3, pp. 9~15, March 2013

Shihchung Chiang and Wei-Chun Wu, "Issues of One Kind of Integro-Differential Equations", AIP Conference Proceedings 1479, pp. 2360~2362, 2012

Shihchung Chiang, "Solutions and Numerical Optimal Issues to Neutral Singular Integro-Differential Equations", Chung Hua Journal of Computational Science, No. 2, pp. 7~17, March 2012

Chien-Chi Yu and Shihchung Chiang, "On the Numerical Optimal Controls for a Class of Integro-Differential Equations of Neutral Type", Chung Hua Journal of Computational Science, No.1, pp. 1~7, March 2011

Hsin-Hao Chen and Shihchung Chiang , "A specific Procedure for analytic Solutions to a Class of Singular Integral Equations", Chung Hua Journal of Science and Engineering, Vol.7, No.3, pp. 29~34, 2009

Shihchung Chiang and Chia-Ju Tsou, "A Semi-Discretized Numerical Scheme for the Solution of a Class of Singular Integro-Differential Equations", Chung Hua Journal of Science and Engineering, Vol.6, No.3, pp. 13~18, 2008

Hsin-Yi Hung and Shihchung Chiang, "Analytic Solution of a Class of Singular Integral Equations – The $\phi = 0$ Condition Case", Chung Hua Journal of Science and Engineering, Vol.6, No.3, pp. 19~28, 2008

Shihchung Chiang, "On the Numerical Rates of Convergence for a Class of Integro-Differential Equations of Neutral Type", Chung Hua Journal of Science and Engineering, Vol.5, No.3, pp. 9~14, 2007

Shihchung Chiang, "On the Numerical Solution of a Class of Singular Integro-Differential Equations", Chung Hua Journal of Science and Engineering, Vol.4, No.3, pp. 43~48, 2006

Shihchung Chiang, "Notes on the Solution of a Class of Singular Integral Equations", Chung Hua Journal of Science and Engineering, Vol.3, No.4, pp. 89-95, 2005.

PERSONAL:

Enjoy bicycling, swimming, golfing and playing tennis

REFERENCES:

Professional and personal references are available upon request.