VITA SUMMARY

Ying Sue Huang, Ph.D

Education
- Ph.D. in Mathematics, Brown University, Providence, RI (1991)
- M.S. in Mathematics, Brown University, Providence, RI (1988)
- B.S. in Mathematics, Beijing University, China (1985)

Academic Experience
- Professor, Department of Mathematics, Pace University, Pleasantville, NY (2000–Present)
- Associate Professor, Department of Mathematics, Pace University, Pleasantville, NY (1998–2000)
- Assistant Professor, Department of Mathematics, Pace University, Pleasantville, NY (1995–1998) *(Position reserved during leave until Summer 1997)*
- Assistant Professor, Department of Mathematics, University of Toledo, Toledo, OH (1993–1995)
- Visiting Assistant Professor, School of Mathematics, University of Minnesota, Minneapolis, MN (1991–1993)

Research Interests
- Differential and difference equations
- Systems of coupled oscillators
- Mathematical modeling in neural networks and biology

Publications
(*Selected peer-reviewed articles*)
1. "Convergence Properties of Second-Order Difference Equations with Monotone Properties" (with Peter Knopf), submitted to *Journal of Difference Equations and Applications* (2023).
2. "Periodic Pattern Repetition for Unbounded Solutions to Finite Difference Equations" (with Peter Knopf), *Journal of Difference Equations and Applications*, 26(7), 871-912 (2020).
3. "Boundedness Properties of the Generalized Todd Difference Equation" (with Peter Knopf), *J. Difference Equ. Appl.*, 25(5), 676-707 (2019).
4. "On the Boundedness of Solutions of a Class of Third-Order Rational Difference Equations" (with Peter Knopf), *J. Difference Equ. Appl.*, 24(10), 1541-1587 (2018).
5. "Sequences of Maps and Convergence Properties of First-Order Difference Equations with Variable Coefficients" (with Peter Knopf), *Journal of Difference Equations and Applications*, 23(4), 779-798 (2017).

(*Full list available upon request*)

Conference Presentations & Invited Talks
(*Selected presentations*)
- "Dynamics of the Generalized Fibonacci Sequence" (with Peter Knopf), *AMS Sectional Meeting*, University of Buffalo, NY (Sept. 2023).

- "Pattern Repetition and Unboundedness of Various Rational Difference Equations" (with Peter Knopf), *AMS Sectional Meeting*, Northeastern University, Boston, MA (April 2018).
- "Mappings with a Single Critical Point and Applications to Rational Difference Equations," *AMS Sectional Meeting*, Hunter College, NY (May 2017).
- "Stability of Delayed Cellular Neural Networks," *Pacific Rim Conference in Mathematics*, Shanghai, China (2005).
- "Synchronization and Desynchronization in Delayed Neural Networks," *International Conference on Dynamical Systems and Differential Equations*, Georgia (2000).

(*Full list available upon request*)

Awards & Honors
- Kenan Research Grant for Travel (2015–2016)
- Scholarly Research Grant for Released Time (1997–2014)
- Summer Research Grant, Pace University (2000, 2002, 2005, 2006)
- NSF Research Planning Grant & Career Advancement Award for Women Scientists & Engineers (1994–1996)
- Summer Research Grant, University of Toledo (1994)
- Fellowship, Department of Mathematics, Brown University (1986–1987)
- Travel Grant, Association for Women in Mathematics (1992)