Keith J Wojciechowski

Assistant Professor, University of Wisconsin- Stout
Mathematics, Statistics & Computer Science Department
College of Science, Technology, Engineering, Mathematics and Management

Office: 202D Jarvis Hall-Science Wing
Phone: 715-232-2243
Email: wojciechowskik@uwstout.edu

Education

- **Ph D Applied Mathematics**
  University of Colorado
  Denver, CO, 2011
- **MS Applied Mathematics**
  University of Colorado
  Boulder, CO, 2003
- **MS Applied Mathematics Specializing**
  DePaul University
  Chicago, IL, 1998
- **BA Mathematics**
  Lawrence University
  Appleton, WI, 1992

Work Experience

Academic - Post-Secondary

- **University of Wisconsin- Stout**, Mathematics, Statistics and Computer Science Department
  Assistant Professor
  August 2011 -
- **Front Range Community College**
  Adjunct Instructor
  August 2007 - May 2008
- **University of Colorado**
  Research Assistant
  Present
- **University of Colorado**
  Research Assistant
  January 2004 - June 2004
- **University of Colorado**
  Research Assistant
  August 2002 - January 2004
- **University of Colorado**
  Teaching Assistant and Instructor
  August 2000 - August 2002
- **Sandia National Laboratory**
  Student Intern
  May 2000 - August 2000

- **Northern Illinois University**
  Teaching Assistant and Instructor
  August 1998 - June 2000
- **Parallax Technical Services**
  Visual Basic Programmer
  October 1997 - August 1998
- **American Business Systems**
  Software Trainer and Network Consultant
  June 1997 - October 1997
- **Kendall College**
  Mathematics and Computer Science Instructor
  June 1996 - June 1997
- **Gordon Technical High School**
  Mathematics Teacher
  August 1992 - June 1996

Industry

- **Science Applications International Corporation**
  Senior Staff Scientists
  June 2004 - July 2011

Intellectual Contributions

Journal Article

- Wojciechowski, K. J., Masihimirzakhanian, T., & Meyers, W. (In Preparation; Not Yet Submitted). A Locally Adaptive RBF-FD Method. .
- Wojciechowski, K. J., & Linnell, K. M. (In Preparation; Not Yet Submitted). Modeling & Simiulation of Swelling Hemostatic Medical Devices. .
- Wojciechowski, K. J., Chen, J., Bennethum, L. S., & Sandberg, K. H. Well-posedness and Numerical Solution of a Nonlinear Volterra Partial Integro-dierential Equation Modeling a Swelling Porous Material. *Journal of Porous Media, 17*.
- Sandberg, K. H., & Wojciechowski, K. J. The EPS Method: A New Method for Constructing Pseudospectral Derivative Operators. *Journal of Computational Physics*.

Presentations

Uncategorized

- Wojciechowski, K. J. (May, 2014). A Nonlinear Integrodierential Equation for Modeling Swelling Viscoelastic Materials. International Conference on Porous Media,
- Wojciechowski, K. J. (November, 2013). Applied Mathematics in Medical Devices. , La Crosse, WI.
- Wojciechowski, K. J. (January, 2013). The Eigen-decomposition Pseudo-Spectral (EPS) Method. JMM,
- Wojciechowski, K. J. (September, 2012). Analyzing and Solving Models of Swelling Porous Materials. MSCS Colloquia Series,
- Wojciechowski, K. J. (May, 2012). Numerical Solution of Nonlinear Volterra Partial Integrodifferential Equations Modeling a Controlled-Relears Drug Delivery Device. INTERPORE Annual Conference, West Lafayette, ID.
- Wojciechowski, K. J. (October, 2011). The Eigen-decomposition Pseudo-Spectral (EPS)Method with Application. STEM Shorts,
- Wojciechowski, K. J. (July, 2010). A Novel Pseudospectral Method for Solving a Nonlinear Volterra Partial Integro-dierential Equation on a Polar Geometry. 2010 SIAM Annual Meeting, Pittsburgh, PA.
- Wojciechowski, K. J. (July, 2010). Swellable Polymer Controlled Release Drug-Delivery Devices: Model Development and Numerical Solution. 2010 SIAM Annual Meeting, Pittsburgh, PA.

- Wojciechowski, K. J. (2009). A Numerical Solution to a Partial Integrodierential Equation Modeling a Swelling Porous Material. 2009 MAA Rocky Mountain Section Meeting,
- Wojciechowski, K. J. (2009). A Numerical Solution to a Partial Integrodierential Equation Modeling a Swelling Porous Material. SIAM GS09,
- Wojciechowski, K. J. (March, 2009). A High-Order Numerical Solution to a Partial Integrodifferential Eqluation Modeling a Swelling porous Material. 2009 SIAM Front Range Applied Mathematics Student Conference, Denver, CO.
- Wojciechowski, K. J. (2008). Using Pseudospectral Methods to Solve a Nonlinear Transport Equation. 2008 SIAM Conference on Mathematical Aspects of Materials Science,
- Wojciechowski, K. J. (2007). Enhancing Multi-conjugate Adaptive Optical Performance Using a Modied Gerschberg-Saxton Phase Retrieval Algorithm. 2007 Directed Energy Professional Society Beam Control Conference,
- Wojciechowski, K. J. (2006). Enhanced Field Conjugation System Simulation Parameter Study. 2006 Directed Energy Professional Society Beam Control Conference,

Grants, Contracts, and Sponsored Research

Contract

- Wojciechowski, K. J. University of Wisconsin -Stout Student Job Program. $5000.

Grant

- Wojciechowski, K. J. University of Wisconsin -Stout CSTEM Small Grant. $3000.
- Wojciechowski, K. J. University of Wisconsin-Stout Just-in-Time Grant. $1480.
- Wojciechowski, K. J. University of Wisconsin -Stout Professional Development Grant. $1500.

Awards, Fellowships, Honors, and Scholarships

Fellowship

- National Project NExT Fellowship, (2012)

Award

- Outstanding Teaching Award, UW-Stout (2012)
- Outstanding TA Award, (2002)

Professional Memberships

- Directed Energy Professional Society
- Society of Industrial and Applied Mathematics