

CURRICULUM VITAE (2017)

PERSONAL DATA

Chad Scott
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EDUCATION

| Degree | Award Date | Institution |
|--------------------------|-------------------|-------------------------------|
| Ph.D. (pure math) | August, 1993 | Syracuse University |
| M.Sc. (applied math) | July, 1990 | North Dakota State University |
| B.A. (math & comp. sci.) | May, 1987 | Concordia College |
| M.S. (computer science) | (near completion) | Syracuse University |

PROFESSIONAL EMPLOYMENT

| Rank | Employer | Dates |
|--|--------------------------|--------------|
| Full Professor and Chair | Univ. of Wisc.-Superior | 9/05-present |
| Associate Professor | Univ. of Wisc.- Superior | 9/99-9/05 |
| Assistant Professor | Univ. of Wisc. -Superior | 9/94-9/99 |
| Teaching Assistant | Syracuse Univ -CIS | 1993-1994 |
| University College Adult and Alternative Learning Teacher | Syracuse University | 1993-1993 |
| Research Fellow | Syracuse Univ -Math | 1992-1993 |
| Teaching Assistant | Syracuse Univ -Math | 1990-1992 |
| Research Assist (appl math) | North Dakota State Univ | 1988-1990 |
| Teaching Assistant (math) | North Dakota State Univ | 1987-1988 |

NOTABLE ACHIEVEMENTS AS DEPARTMENT CHAIR

New Computer Science Major (University of Wisconsin System)
New Minor Program (Information Technology and Systems)
New Academic Building Department Wing Adjacencies (Swenson Hall)
Dual Degree Program with Kafkas Univeristy (Kars Turkey)
Pre-Engineering Associates Degree (UW-Superior)
Major CSCI Laboratory Recurring Budget Line (in progress)

OTHER PROFESSIONAL EXPERIENCE

| Experience | Dates |
|--|--------------|
| Content Developer for McGraw-Hill / ALEKS project | Summer, 2015 |
| Chair of the Wisconsin University System Mathematics Placement Exam Committee | 2001-2006 |
| Advanced Placement Calculus Faculty Consultant for ETS | 1997-2012 |
| Lead Developer (LAMP Architecture) for Oppna Web Solutions | 1998-2006 |
| Member, University of Wisconsin - Center for Placement Testing Mathematics Placement Exam Committee | 1994-current |
| Coordinator, NYS Regional Graduate Mathematics Conference | Spring, 1993 |
| President, Mathematics Graduate Organization of Syracuse Univ | 1992-1993 |

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| Instructor, Syracuse Univ Grad School (Intl Teach Assit program) | 1992-1993 |
| Database Design Team, American Crystal Sugar Research | Spring, 1987 |

CURRENT ACADEMIC INTERESTS

Mathematics

Analysis on Manifolds, Nonlinear PDEs, Nonlinear Hodge Theory, Differential Geometry, Differential Forms and Harmonic Analysis, Measure, Real and Complex Functions

Computer Science

Web applications, LAMP, CSS, SQL, javascript, python and sage, simulation

ACADEMIC HONORS AND AWARDS

| Award | Brief Description | Dates |
|----------------------|------------------------------------|--------------|
| NSF ROA | Under DMS-9401104 | Summer, 1998 |
| NSF ROA | Under DMS-9401104 | Summer, 1997 |
| NSF ROA | Under DMS-9401104 | Summer, 1995 |
| Doctoral Prize | 5 awards among 250 Syracuse Ph.D.s | Spring, 1994 |
| Research Fellowship | Syracuse University | 1992-1993 |
| Summa Cum Laude Grad | M.Sc. in mathematics GPA: 4.0 | Summer, 1990 |
| Summa Cum Laude Grad | B.A. in math and Computer Science | Spring, 1987 |

PUBLICATIONS & PRESENTATIONS

- 1) **Performance of Program BDIA. Integral Equation Solution for the Band Electrode**, April 1989, Mathematics, NDSU.
- 2) **Performance of Program RDLA. Integral Equation Solution for the Ring Electrode**, April 1989, Mathematics, NDSU (with D.K. Cope).
- 3) **Transient Behavior at Planar Microelectrodes. Diffusion Current at a Band Electrode by an Integral Equation Method II**, J. Electroanal. Chem. 280 (1990), 27-35 (with D.K. Cope, U. Kalapathy and D.E. Tallman).
- 4) **Transient Behavior at Planar Microelectrodes. Diffusion Current at Ring Electrodes by the Integral Equation Method**, J. Electroanal. Chem. 285 (1990), 49-70 (with D.K. Cope and D.E. Tallman).
- 5) **LP Theory of Differential Forms on Manifolds**, Trans. Amer. Math. Soc. 347 (1995), 2075-2096.
- 4) **Boundary Value Estimates for Harmonic Forms**, Proc. Amer. Math. Soc. 124 (1996), 1467-1471 (with T. Iwaniec and M. Mitrea).
- 5) **Nonlinear Hodge Theory on Manifolds with Boundary**, Annali di Matematica pura ed applicata (IV), Vol. CLXXV (1999), 37-115 (with T. Iwaniec and B. Stroffolini)
- 8) **Open Source Web Based Solution, Emprove, for Satisfying JCAHO Standards**, software and patent application (with G. Ammerman).
- 9) **The Hadamard-Shwarz Inequality**, Journal of Function Spaces and Applications, Vol. 2, No. 2 (May 2004) (with A. Kravetz, T. Iwaniec, J. Kauhanen)
- 10) **The 25 Cent Problem (An Homage to Erdos)**, Joint Mathematics Meetings, San Antonio TX, (January, 2015)

- 11) **Computations for Alphavirus Vectors and Vaccination**, in progress, (with K.Kamrud)
- 12) **A Geometric Characterization of Higher Order Sobolev Spaces on Manifolds**, in progress / preprint, (with L. Budney)
- 13) **Sage in Upper Division Mathematics Courses**, 29th International Conference on Technology in Collegiate Mathematics, (March, 2017)

M.Sc. THESIS

Increased Efficiency in a Solution Method for Integral Equations of the First Kind with Logarithmic Singularities, July 1990, NDSU.

Ph.D. THESIS

Lp Theory of Differential Forms on Manifolds, August 1993, Mathematics, Syracuse University.

MEMBERSHIP

AMS (American Mathematical Society)
MAA (Mathematical Association of America)

REFERENCES

Victor Piotrowski, Lead Program Director, National Science Foundation
Tadeusz Iwaniec, Professor of Mathematics, Syracuse University.
Davis Cope, Professor of Mathematics, North Dakota State University.
Dean Yohnk, Dean of Faculty, University of Wisconsin - Superior