Peter S. Benson
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EDUCATION

University of Michigan **Ann Arbor, MI**
Master's of Education with Secondary Teaching Certificate June, 2013

University of Michigan **Ann Arbor, MI**
PhD Industrial & Operations Engineering May, 1990

University of Michigan **Ann Arbor, MI**
Master's of Mathematics December, 1982

University of Michigan **Ann Arbor, MI**
B.S.E. (magna cum laude) Industrial & Operations Engineering December, 1982

WORK EXPERIENCE

Quant Placement Director, University of Michigan **March 2016-**

- Work with students in the Master of Quantitative Finance and Risk Management program, helping them secure internships and full-time positions via programming workshops, one-on-one interview preparation, and developing their web presence.

FlexTech High School, Brighton, MI **August 2013-June 2015**

- Taught physics, calculus, and computer science in a blended, project-based learning environment. Developed virtual labs for physics, math, and computer science. Created new, more engaging math courses that reengaged upper level students and helped them fulfill graduation requirements.

Ypsilanti High School **September 2012-June 2013**

- Taught algebra, pre-calculus, calculus, and physics with mentor James Tuttle. Participated in Algebra Project workshop training led by Bob Moses at the U of M.

Software development lead, JPMorgan and RiskMetrics **1994-2004, 2006-2010**

- Led several teams building analytical backend and frontend software in C++, Java.

Head of Education, RiskMetrics Group, Ann Arbor, MI **2004-2006**

- Created and taught highly regarded 3-5 day risk management workshops for employees, taught around the world.
- Students worked in pairs, hands-on, creating their own models of financial markets.
- Adapted the employee workshops for clients, and taught in the US, Europe, and Asia.

Adjunct Professor, Financial Engineering, U of M, Ann Arbor **2004-2005**

- Created and taught graduate course in market and credit risk analysis (IOE 591) for Master's of Financial Engineering students.

Pilot in Michigan Air National Guard, Mt. Clemens, MI **1983-1991**

- Flew F-4s and F-16s at Selfridge ANGB in active air defense role for NORAD. Intercepted TU-95 Bear bombers off the US coast. Wrote F-4 radar training software, used in all F-4 training programs.

GSI, Industrial & Operations Engineering, U of M, Ann Arbor **1985-1987**

- Teaching Assistant with IOE 416 (Dynamic Programming), IOE 510/Math 561 (Linear Programming), IOE 515 (Stochastic Processes)

GSI, Mathematics, U of M, Ann Arbor **1981-1982**

- Taught as instructor of record for Math 105, 115, and 116.

Tutor, Math Lab, North Dakota State University, Fargo, ND **1978-1979**

- Tutored algebra and calculus students in drop-in tutoring lab.

EDUCATION SERVICE

U of M's School of Ed 4T Virtual Conference **May 2015**

- Presented closing keynote address *Learning to Code and Coding to Learn* about my experience teaching programming to high school students.

U of M's School of Ed 4T Virtual Conference **May 2013**

- Presented *Learning from Scratch*, a workshop for teachers who are interested in using Scratch in their classroom.

U of M School of Education Ambassador **2013-**

- Talk to prospective education students about the education program at the University of Michigan (http://www.soe.umich.edu/people/profile/benson_peter/).

W.K. Kellogg Foundation Woodrow Wilson Teaching Fellow **2012-**

- STEM teaching fellow in high-need Michigan secondary schools. Fellowship includes lifelong membership in the Woodrow Wilson Fellows network.

RESEARCH

- "Distribution of Defaults in a Credit Basket", RiskMetrics Journal, 2005, pp 19-23, 1997.
- "A general approach to calculating VaR without volatilities and correlations", with Peter Zangari, RiskMetrics Monitor, 2nd Quarter, pp 19-23, 1997.
- "Optimal Solution Approximation for Infinite Positive-definite Quadratic Programming", with Robert L. Smith, I.E. Schochetmann, and James C. Bean, Journal of Optimization Theory and Applications, 85, pp 235-248, 1995.
- "Optimal Solution Characterization for Infinite Positive Semi-definite Quadratic Programming," with Robert L. Smith, I.E. Schochetmann, and James C. Bean, Applied Mathematics Letters, Vol. 7, pp 65-67, 1994.
- "A Calculus for Infinite Horizon Optimization," PhD dissertation, 1990.