

# Curriculum Vitae

## Sanja Pantić

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### EDUCATION

**2012 PhD in Mathematics** from the University of Illinois at Chicago.

- **Thesis:** *A Study of Solitary-Wave Solution for the Extended Benjamin-Bona-Mahony Equation,*
- **Advisor:** Jerry Bona

**2003 MS in Mathematical Computer Science** from the University of Illinois at Chicago (UIC).

**1992 B.Sci.** Mathematics and Computer Science, University of Belgrade, Faculty of Mathematics.

### TEACHING EXPERIENCE

- 2019 - present **Visiting Assistant Professor** at Virginia Tech, Blacksburg, Virginia.
  - Teach Multivariable calculus (Fall '19, Spring '20) and Linear algebra (Spring '20)
  - Create and grade exams.
- 2017 - present **Lecturer** at Cal Poly, San Luis Obispo, California.
  - Taught all Calculus sequences: Math 141 Calculus 1 (Fall '17), Math 142 Calculus 2 (Fall '17, Fall '18), Math 143 Calculus 3, Math 241 Calculus 4 (Winter '18), Math 161 Calculus for the Life Sciences 1 (Winter '19), Math 162 Calculus for the Life Sciences 2 (Spring '18, Spring '19), Math 182 Calculus for Architecture and Construction Management (Spring '18, Winter '18), Math 221 Calculus for Business and Economics (Winter '19).
  - Create homework, quizzes and exams, grade and supervise graders.
- 2016 - 2017 **Lecturer** at Rice University, Houston, Texas.
  - Taught Introduction to Computational Engineering, a fast-paced intense introduction to mathematical and scientific computing via Matlab.
  - Taught Linear Algebra *in Situ*, applied matrix analysis class.
  - Taught Pedagogy class for research lab assistants that hold recitation classes.
  - Coordinate and supervise graders and research lab assistants.
- 2015 - 2016 **Visiting Professor** at University of Hartford, Connecticut.
  - Taught and graded all sections of Multivariable Calculus class using Maple and TI-89.
  - Taught and graded one of the sections of Precalculus class using TI-89.
- 2012 - 2015 **Lecturer** at the University of Illinois at Chicago.
  - Coordinated and taught Mathematical Reasoning, Linear Algebra for math majors, Finite Mathematics and Vector Calculus. Supervised and evaluated teaching assistants and graders, prepared syllabus, exams, quizzes and homework and helped grade exams and quizzes.
  - Taught Precalculus, Calculus 1 and Calculus 2 classes. Helped grading exams while in some classes homework was partially done on-line using Matlab.
  - Taught in the computer laboratory using MyMathLab Beginning Algebra (not a credited class) and fast track Introductory Algebra (credited) classes.
  - Taught Linear Algebra, a proofs orientated class for Mathematics majors. Prepared syllabus, prepared and graded quizzes, exams and homework.
- Spring and Summer 2013: **Part time Instructor** at North Central College - Naperville, Illinois. Taught series of classes in Business Statistics at the department of Marketing and Management.

- Spent summers as a graduate student teaching for the CHANCE and TRIO programs as **Instructor** at the University of Illinois at Chicago.  
Taught Precalculus to university students in urban Chicago who were the first generation from their families to go to university.  
Taught workshop "Introduction of Cryptography" to advanced female high-school students at the University of Chicago.
- 2011 - 2012 **Professor** at DePaul University, Chicago, Illinois.  
Taught Algebra, Precalculus, Calculus 1, Calculus 2 and Business Statistics where MathLab on-line feature was used to create homework for classes. Prepared syllabus, quizzes and exams and graded.
- 2004 - 2011 **Research Assistant** at UIC performing numerical simulations for wave motion using FORTRAN and Matlab and helping with editorial work for numerous journals for Dr Jerry Bona.
- 2001 - 2004 **Teaching Assistant** at UIC for many different classes, as well as teaching at the Emerging Scholars Program. Supervised and coordinated cooperative learning workshops that are an addition to regular discussion classes; tutored in the math tutoring center.
- 2000 - 2001 **IT and Computer Science Teacher** at Lindblom Math and Science Academy, a magnet school which is part of the Chicago Public school system. Taught Computer Science and Information Technology classes as a full-time teacher in the classroom as well as in the computer laboratory.
- 1996 - 1999 **High School Teacher**, Belgrade. Lifetime certified teacher in former Yugoslavia for all grades and levels in Mathematics, Computer Science and Information Technology. Computer laboratory coordinator and hands-on instructor. Created teaching schedule for entire school.

## RELEVANT EXPERIENCE

- Programing expertise: **MATLAB, FORTRAN, Mathematica.**
- 1992- 1996 **Researcher** Robotics Department of the Institut Mihajlo Pupin. Performed mathematical modeling and wrote software in a team for investigation of robot dynamics for the artificial knee project directed by Dr Vukobratović.
- 2004 - 2012 Research Assistant Department of Mathematics, Statistics and Computer Science at the University of Illinois at Chicago.
- Part-time job writing in **LaTeX** for Tehnolosko-metaluski Fakultet, University of Belgrade.
- Native Serbian speaker and can converse in most Slavic languages.

## CONFERENCES AND WORKSHOPS

- Mathematical Science Research Institute July 2008 **Climate Change** workshop.
- **Nonlinear Evolution Equations Georgia Center for Continuing Education** program 2009
- Joint Mathematics Meetings New Orleans 2011 presented: "Numerical Simulations of the Solitary Wave Solutions for the eBBM Equation".
- **Nonlinear Evolution Equations Georgia Center for Continuing Education** program 2011 presented "A Study of Solitary Wave Solution for the eBBM Equation, preliminary results".
- Joint Mathematics Meetings, Boston 2012 "Solitary Wave Solutions of the Generalized Regularized Long Wave Equation".
- SIAM Conference on Nonlinear Waves and Coherent Structures (NW12), June 13-16, 2012 at The University of Washington in Seattle, Washington, poster "Generalized Regularized Long Wave Equation".
- 69th Midwest PDE Conference, UIC, Chicago, IL, April 2012

- Annual SIAM Chapter Meeting, UIC, Chicago, IL, April 2012 "Numerical Solitary Wave Solutions of eBBM equation"
- Joint Mathematics Meetings San Diego 2013 presented two talks: "Global Well-Posedness for the eBBM-model" and "Historical Survey of Solitary Wave Phenomena. Preliminary report"
- Nonlinear Evolution Equations Georgia Center for Continuing Education program 2013 presented
- University of Notre Dame "2<sup>nd</sup> Annual Midwest Women in Mathematics Symposium", April 5 2014 presented "Wave motion".
- Institute of Pure and Applied Mathematics UCLA 2015 "**Systemic Risk and Financial Networks**".
- University of Novi Sad, Serbia: "International Conference on Generalized Functions GF2018" August 27 - 31, 2018, presented: "An energy study of solitary-wave solutions for the Extended Regularized Long-Wave equation".

**Cal Poly Presentations:**

- Department of Mathematics colloquium, presented on November 9<sup>th</sup>, 2018 "An energy study of solitary-wave solutions for the Extended Regularized Long-Wave equation".