

## John Darges

---

CONTACT INFORMATION	North Carolina State University Department of Mathematics Language & Computer Labs 202 Raleigh, NC 27607 USA	<i>Phone:</i> +1-919-518-6812 <i>Email:</i> jedarges@ncsu.edu <i>jedarges.wordpress.ncsu.edu</i>
CITIZENSHIP	US Citizen	
INTERESTS	Uncertainty quantification, sensitivity analysis, inverse problems, Bayesian inference, surrogate methods	
EDUCATION	<b>North Carolina State University, Raleigh, NC, USA</b> Ph.D., Mathematics, Expected 2023 <i>Co-advisors: Alen Alexanderian and Pierre Gremaud</i> M.S., Mathematics 2020  <b>University of North Carolina, Chapel Hill, NC, USA</b> B.S., Mathematics, 2017 B.A., Chemistry, 2017	
TEACHING	<b>Department of Mathematics, North Carolina State University, Raleigh, NC, USA</b> <i>Graduate Instructor: MA 511 (Advanced Calculus I)</i> <b>Fall 2020</b> <i>Graduate Instructor: MA 241 (Calculus II)</i> <b>Summer 2020</b> <i>Teaching Assistant: MA 131 (Calculus for Life and Management Sciences A)</i> <b>Spring 2020</b> <i>Teaching Assistant: MA 241 (Calculus II)</i> <b>Fall 2019</b> <b>Department of Chemistry, University of North Carolina, Chapel Hill, NC, USA</b> <i>Teaching Assistant: CHEM 101L (Introductory Chemistry Lab I)</i> <b>May 2016 to June 2016</b>	
EMPLOYMENT	<b>Department of Mathematics, North Carolina State University, Raleigh, NC, USA</b> <i>Research Assistant</i> <b>Spring 2021 to Present</b> <i>Grader: MA 231H (Calculus for Life and Management Sciences B)</i> <b>Spring 2019</b> <i>Grader: MA 351 (Discrete Mathematics)</i> <b>Fall 2018</b> <b>Avioq, Inc., Durham, NC, USA</b> <i>Contractor</i> <b>February 2018 to August 2018</b> <b>Department of Chemistry, University of North Carolina, Chapel Hill, NC, USA</b> <i>Undergraduate Researcher</i> <b>August 2014 to May 2016</b> <i>Lab Technician</i> <b>August 2013 to May 2014</b>	
PUBLICATIONS	<i>Extreme learning machines for variance-based global sensitivity analysis.</i> John Darges, Alen Alexanderian, Pierre Gremaud. Submitted 2022.	

PRESENTATIONS	<p><b>Poster Talk</b></p> <p>Extreme learning machines for variance-based global sensitivity analysis. RAI Amsterdam Convention Center, Amsterdam, Netherlands. SIAM Conference on Computational Science and Engineering. March 2023.</p> <p><b>Invited Talk</b></p> <p>Extreme learning machines for variance-based global sensitivity analysis. Walter E. Washington Convention Center, Washington, D.C., USA. Joint Statistical Meetings. August 2022.</p> <p><b>Poster Talk</b></p> <p>Extreme learning machines for variance-based global sensitivity analysis. Florida State University, Tallahassee, FL, USA. Conference on Sensitivity Analysis of Model Output (SAMO). March 2022.</p>
SERVICE ACTIVITIES	<p><b>Association of Women in Mathematics</b> <span style="float: right;"><b>2022</b></span></p> <p>Volunteered at educational workshops to encourage and foster young women’s interest in mathematical sciences</p> <p><b>Math Doesn’t Bug Me</b> <span style="float: right;"><b>2019</b></span></p> <p>Volunteered at mathematics outreach events by helping participants solve mathematics-related games and puzzles and explaining the mathematics involved</p> <p><b>Alpha Chi Sigma</b> <span style="float: right;"><b>2015 to 2017</b></span></p> <p>Volunteered at science outreach events by demonstrating and helping participants conduct chemistry experiments. Provided tutoring services to primary school students</p> <p><b>Centro Para Familias Hispanas</b> <span style="float: right;"><b>2012 to 2013</b></span></p> <p>Tutored students in elementary school level mathematics, science, and language arts</p>
MEMBERSHIPS	Society for Industrial and Applied Mathematics (SIAM), American Mathematical Society (AMS)
SKILLS	Python, MATLAB, LaTeX
LANGUAGES	English, Spanish