

# ANDREW COOPER

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<b>CONTACT INFO</b>	Department of Statistics Virginia Tech  Hutcheson Hall, 250 Drillfield Drive Blacksburg, VA 24061, USA	<i>E-mail:</i> ahcooper@vt.edu <i>Homepage:</i> <a href="https://andrewdjac.github.io">https://andrewdjac.github.io</a>
<b>RESEARCH INTERESTS</b>	<p>The design and analysis of computer experiments including nonstationary surrogates, uncertainty quantification, active learning, optimization, calibration, and reliability.</p> <p>Computing and statistical inference with a focus on computer experiments and uncertainty quantification. Introducing sound statistical theory to machine learning and artificial intelligence applications for the purposes of making them more accurate, reliable, and interpretable. Bolstering technical projects by quantifying model uncertainty and risk.</p>	
<b>EDUCATION</b>	<p>VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY <b>Ph.D.</b> Statistics, March 2026, advised by Robert B. Gramacy Dissertation: <i>Latent Gaussian Process Surrogates for Non-Gaussian Response Surface Modeling</i></p> <p>DUKE UNIVERSITY Honors Scholar; 4.00 GPA <b>M.S.</b> Statistics, May 2020, advised by Alexander Volfovsky <b>B.S.</b> Statistical Science, May 2018 <b>B.S.</b> Computer Science, May 2018</p>	
<b>HONORS &amp; AWARDS</b>	<p>ASA Section on Statistics in Defense and National Security Student Paper Award; 2026 Virginia Tech Jean D. Gibbons Fellowship; 2023 Duke Undergraduate Teaching Assistant Award Nominee; 2018</p>	
<b>IN REVIEW</b>	<p><b>Cooper, A.</b>, Strait, J., Dorn, M. F., Gramacy, R. B., Parsons, B. P., &amp; Cattaneo, A. (2025). Robust Wrapped Gaussian Process Inference for Noisy Angular Data. arXiv:2512.00277.</p>	
<b>PEER- REVIEWED PAPERS</b>	<p><b>Cooper, A.</b>, Booth, A. S., &amp; Gramacy, R. B. (2025). Modernizing full posterior inference for surrogate modeling of categorical-output simulation experiments. <i>Quality Engineering</i>, 38(1): 91-110.</p> <p>Sauer, A., <b>Cooper, A.</b>, &amp; Gramacy, R. B. (2023). Vecchia-approximated deep Gaussian processes for computer experiments. <i>Journal of Computational and Graphical Statistics</i>, 32(3), 824-837. arXiv:2204.02904</p>	
<b>OTHER PUBLICATIONS</b>	<p>Booth, A. S., <b>Cooper, A.</b>, &amp; Gramacy, R. B. (2024). Nonstationary Gaussian process surrogates. <i>Handbook of Uncertainty Quantification, to appear</i>; arXiv:2305.19242</p>	

**OPEN SOURCE  
SOFTWARE**

wrapgp: An R-package for wrapped Gaussian Process (WGP) modeling.  
<https://github.com/lanl/wrapgp/tree/main>

glam: An R-package for Generalized Linear And Additive (“GLAM”) modeling.  
<https://CRAN.R-project.org/package=glam>

**TALKS &  
SEMINARS**

*Key:* **IT** ≡ Invited Talk ≈ 30m; **ST** ≡ Speed Talk 8m; **P** ≡ Poster

Wrapped Gaussian Processes for RFID Localization

IT July 2025 **Quality and Productivity Research Conference**, Seattle, WA

Deep Gaussian Processes for Classification Tasks

IT Oct 2024 **Fall Technical Conference**, Nashville, TN

P March 2024 **SIAM Conference on Uncertainty Quantification**, Trieste, Italy

P March 2023 **Spring Research Conference**, Banff, Calgary

Robust Wing Design Optimization

ST April 2024 **Defense and Aerospace Test and Analysis Workshop**, Alexandria, VA

**OTHER  
EMPLOYMENT**

LOS ALAMOS NATIONAL LABORATORY: statistics intern; June 2024 - Present

NASA Langley Research Center: graduate research assistant; June - September 2023

AEROSPACE CORPORATION: reliability and statistics intern; June - August 2022

**LECTURING**

STAT 3704 STATISTICS FOR ENGINEERING APPLICATIONS, VIRGINIA TECH: undergraduate statistics and probability course for engineering students. Weekly 50-minute lectures; Spring 2022.

**SERVICE**

Mu Sigma Rho, Vice President of Virginia Tech Chapter; 2023-2025