YANJIE TONG

Atlanta, GA

(404) 536-0072 | e-mail: ytong80@gatech.edu

EDUCATION

Georgia Institute of Technology Aug. 2024 – Now

Ph.D. in Computational Science and Engineering

Advisor: Peng Chen, **GPA:** 4.00/4.00

Tsinghua University Sep. 2020 – Jun. 2024

B.S. in Mathematics and Physics and B.Eng. in Energy and Power Engineering

GPA: 3.89/4.00 (Top 6/44)

Relevant Courses: Calculus (A); Linear Algebra (A-); Fundamentals of Physics (A); Numerical Analysis (A-); Mathematical Physics Equations (A); Probability and Stochastic Processes (A); Statistical Inference (A); Linear Regression Analysis (A); Multivariate Statistical Analysis (A-); Engineering Mechanics (A+); Fluid Mechanics (A); Fundamentals of Control Engineering (A-)

PUBLICATIONS

1. **Yanjie Tong**, Qingzhou Lu, Siyu Ding, Xingjian Wang. "A parametric reduced-order model based on tensor decomposition for unstructured mesh data." Journal of Computational Physics, Vol. 541, 2025, 114300.
2. Mingshuo Zhou, Ruiye Zuo, Chih-Li Sung, **Yanjie Tong**, Xingjian Wang. "Region-optimal Gaussian process surrogate model via Dirichlet process for cold-flow and combustion emulations." Computer Methods in Applied Mechanics and Engineering, Vol. 439, 2025, 117894.

OTHER RESEARCH EXPERIENCES

Gaussian Process Subspace Prediction for Nonlinear Model Reduction Sep. 2022 – Sep. 2023

Advisor: *Xingjian Wang, Associate Professor, Department of Energy and Power Engineering, Tsinghua University & Ruda Zhang, Assistant Professor, the Uncertainty Quantification Lab, University of Houston*

- Compared reduced-order models and hyperreduction methods for nonlinear flow field problems, and applied Gaussian Process Subspace Regression to predict POD basis over the parameter space.

AWARDS AND SCHOLARSHIPS

The Chinese Mathematics Competitions (CMC) Final, First Prize, National 3rd Place	2023
Alibaba Global Mathematics Competition, Finalist	2022
Scholarship of Academic Excellence, Tsinghua University	2021 & 2022

TEACHING AND ACADEMIC SERVICES

TA for Modeling and Simulation (CSE 6730)	2025 Spring, Fall
TA for Machine Learning (CS 7641)	2025 Summer
Reviewer for Journal of Computational Physics	2025

EXTRACURRICULAR ACTIVITIES

Harvard Summit for Young Leaders in China (HSYLC) Aug. 2023

Chinese Seminar Leader *Beijing, China*

- Designed and delivered a week-long bilingual seminar on Data Science Thinking Mode and Power Engineering Applications.
- Instructed talented high school students in Capstone Projects concerning Data Science.

TECHNICAL SKILLS

Programming Language	Python, C++, Matlab, R, Java
Tool and Software	Git, Linux, MySQL, AutoCAD, SolidWorks, Ansys
Language	Chinese (Native), English (Fluent)