

Chayanon (Namo) Wichitrnithed

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5012 Duval, Austin, TX 78751

EDUCATION

Oden Institute for Computational Engineering and Sciences

May 2020 - Present

University of Texas at Austin

Ph.D. Computational Science, Engineering, and Mathematics

Advisor: Clint Dawson

GPA: 3.9

Georgia Institute of Technology

August 2016 - May 2020

B.S. Physics with Highest Honor

Minor in Scientific & Engineering Computing

GPA: 3.94

RESEARCH AREAS

Storm surge simulations, finite element methods, high performance computing

TECHNICAL SKILLS

Programming Languages

C, C++, Fortran, Python, MATLAB

Software

ADCIRC, DG-SWEM

Others

GNU/Linux, Git, L^AT_EX, Tracker

RESEARCH EXPERIENCE

Graduate Research Assistant

2021 - Present

Computational Hydraulics Group, Oden Institute

- Adding features to DG-SWEM
- Cutting mesh
- Coupling ADCIRC and DG-SWEM

Undergraduate Research Assistant

2017 - 2020

Pattern Formation and Control Lab, Georgia Tech

- Under the guidance of Dr. Michael Schatz and Dr. Roman Grigoriev, investigated behavior of current-driven quasi-2D flows in a chessboard magnet array. Responsible for generating MATLAB simulations for variations of the flow and their visualizations. Performed particle image velocimetry (PIV) to compare experimental data with simulation, particularly in the turbulent regime.

- Tested the accuracy of a parameter estimation algorithm of quasi-2D flows using simulation and experimental data. Assisted in identifying the impact of different components of the program on the performance of the algorithm.
- Implemented artificial neural networks (ANNs) to predict chaotic trajectories. Experimented with different models and tunings of ANNs and tested their behavior on several nonlinear systems.

PRESENTATIONS

1. Planet Texas 2050 Conference Apr 2022
 Austin, TX
Developing a Compound Flood Model using the Discontinuous Galerkin Method
2. 71st Annual Meeting of the APS Division of Fluid Dynamics Nov 2018
 Atlanta, GA
The Impact of Boundary Conditions on Spectral Condensation of Turbulence: Numerics and Experiment

AWARDS

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| NIMS Fellowship, UT Austin | 2020 - 2024 |
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