Chayanon Wichitrnithed

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Education

Georgia Institute of Technology **Expected graduation: May 2020**

B.S. in Physics
Minor in Scientific & Engineering Computing
Overall GPA: 3.92/4.00

Relevant Coursework

Computational Science and Engineering (CSE) Algorithms, Numerical Analysis, Computational Problem Solving for Scientists and Engineers, Complex Analysis, Differential Equations, Linear Algebra, Classical Mechanics, Quantum Mechanics, Classical Electrodynamics

Technical Skills

Programming Languages Python, MATLAB, C, Haskell, Scheme, Java

Others Familiarity with GNU/Linux, LaTeX, Tracker

Research Experience

Research Assistant, Pattern Formation and Control Lab, Georgia Tech
Fall 2017 - Present

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. Currently performing particle image velocimetry (PIV) to compare experimental data with simulation, particularly in the turbulent regime.

Summer 2019

Tested the accuracy of a data-driven algorithm in estimating parameters 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.

Summer 2018

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.

Presentation

The Impact of Boundary Conditions on Spectral Condensation of Turbulence: Numerics and Experiment
71^{st} Annual Meeting of the APS Division of Fluid Dynamics
November 2018, Atlanta, GA