

Anthony Stone

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[My Website](#)

[My GitHub](#)

Curriculum Vitae

Education

- **Southern Connecticut State University**—B.S. in Computer Science, minor in Mathematics, (GPA: 4.0)
- **Current Coursework**—*Theory of Programming Language, Operating Systems, Distributed Systems*
- **Previous Coursework**—*Independent Studies in Math and Computer Science, Algorithm Analysis, Discrete Mathematics, Linear Algebra*

Research Interests

- **Theoretical Computer Science**—Approximation algorithms, combinatorial optimization, algorithm analysis, and time complexity.

Research Experience

- **UAV and CNN for Concrete Crack Detection**—[Repository](#)
 - Independent study in the Fall 2025 [Alaa Sheta](#) exploring efficient computer vision models, as well as image processing, and wireless connectivity.
 - Evaluated real-time crack detection in simulated bridge environments utilizing a transfer-learning convolutional neural network, and a drone platform.
- **Metaheuristics for ANN Training**—[Repository](#)
 - Research assistant position in the Summer 2025 session with [Alaa Sheta](#) analyzing heuristic algorithms, neural networks for regression tasks, and data science workflows.
 - Trained and evaluated single layer feed-forward neural networks using metaheuristic search algorithms.
- **Simulations of Dynamical Systems**—[Repository](#)
 - Independent study in the Spring 2025 session with [Daniel Cicala](#) investigating differential equations, and discrete difference equations, focusing on numerical solving techniques.
 - Developed scripts to compute and visualize ordinary and stochastic differential equations.

Teaching Experience

- **Peer Academic Leader**—Teaching assistant through [CASAS](#).
 - Fall 2025—*Introduction to Programming*.
 - Spring 2026-present—*Data Structures and Computer Systems*.
- **Tutoring**—One-on-one tutoring sessions through [CASAS](#).
 - Computer science courses from *Introduction to Programming* through *Algorithm Analysis*.
 - Math courses from *Algebra Basics* through *Linear Algebra*.

Presentations

- **UAV and CNN for Concrete Crack Detection**—Presented to the SCSU Computer Science Club.
- **Simulating Dynamical Systems in Python**—Presented to the SCSU Math Seminar.

Other Projects

- **Honors Thesis**
 - Pursuing an Honors Thesis in the Fall 2026—Approximation algorithms for embedding problems in graph theory.
- **Educational Resources**—*Introduction to Python, Data Structures, and Computer Systems*
 - Developed comprehensive lecture notes designed to function as a standalone guide and resource for students.