

# Anthony Stone

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[My Website](#)

Curriculum Vitae

[My GitHub](#)

## Education

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- **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

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

## Research Experience

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- **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

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- **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

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- **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

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- **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.