Derin Gezgin

CONTACT Information

dgezgin@conncoll.edu deringezgin.github.io github.com/deringezgin linkedin.com/in/deringezgin

EDUCATION

Connecticut College, New London, CT

August 2023 - May 2027

GPA: 4.0/4.0

 $Bachelor\ of\ Arts$

Double Major: Computer Science & Statistics and Data Science

Advisors: Ozgur Izmirli & Yan Zhuang

RESEARCH EXPERIENCE

Software Engineering Group

May 2025 - Present

Undergraduate Student Researcher, Cornell University

• Advisor: Dr. Saikat Dutta

Autonomous Agent Learning Lab

July 2024 - Present

Undergraduate Student Researcher, Connecticut College

- Advisor: Dr. Gary Parker & Supervisor: Jim O'Connor
- Evolved a game agent using CMA-ES, which uses an LSTM as a decision network to play Sparrow Mahjong, that can win 30% more games than the baseline agent
- Work on a project focusing on hexapod gait generation, aiming for IJCCI 2025

Informatics Lab May 2024 - Present

Undergraduate Student Researcher, Connecticut College

- Advisor: Dr. Timothy Becker
- Developed an image classification pipeline using vision transformers to classify water-flow images around Connecticut which achieved over 90% accuracy on unseen data

PUBLICATIONS

- [1] Evolutionary Optimization of Deep Learning Agents for Sparrow Mahjong Jim O'Connor, Derin Gezgin, Gary Parker In review for IEEE Conference on Games 2025
- [2] Evolving Neural Controllers for Xpilot-AI Racing Using Neuroevolution of Augmenting Topologies

Jim O'Connor, Nicholas Lorentzen, Gary B. Parker, **Derin Gezgin** In review for IEEE Conference on Games 2025

[3] A framework for river connectivity classification using temporal image processing and attention based neural networks.

Timothy James Becker, **Derin Gezgin**, Jun Yi He Wu, Mary Becker ACM Conference on Computing and Sustainable Societies 2025 arxiv.org/abs/2502.00474

Talks & Presentations

Machine Learning Image Based In-Stream Water Flow Classification

- Poster presentation at Northeast Aquatic Biologists Conference
- Oral presentation at the weekly colloquium of the Connecticut College Summer Science Research Institute
- Poster presentation at Connecticut College's 2024 All-College Symposium.

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HONORS & AWARDS

Summer Science Research Institute

Summer 2024 & Summer 2025

Awarded \$4,000 (2024) and \$4,500 (2025) for summer research at Connecticut College

Dean's High Honors

Every Semester

Awarded each semester for maintaining a GPA above a threshold determined by the academic performance of the past four graduating classes

Sophomore Computer Science Award

Spring 2025

For excellence in Computer Science.

Sophomore Julia Wells Bower Prize

Spring 2025

For distinction in mathematics, offered by an anonymous donor in honor of Julia Wells Bower, Professor Emeritus of Mathematics.

TEACHING

Teaching Assistant & Grader

Spring 2024 - Present

EXPERIENCE Connecticut College, New London, CT

COM110: Introduction to Computer Science

COM212: Data Structures

Spring 2024 - Present Fall 2024 - Present

Accumulated over 300 hours of service

DEPARTMENTAL

Connecticut College CS Student Advisory Board

August 2024 - Present

SERVICE

Diversity Chair

SKILLS Programming Languages: Python, Java, R, Matlab, LaTeX, Scheme

Libraries: PyTorch, TensorFlow, Scikit-learn, NumPy, Jax, Pandas, MatplotLib, Pgx

Languages: English (Fluent) & French (Fluent) & Turkish (Native)