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
Bachelor of Arts — **GPA: 4.0/4.0**
Double Major: Computer Science & Statistics and Data Science
Advisors: Ozgur Izmirli & Yan Zhuang

Research Experience

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 IEEE-SMC 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 (COG) 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 (COG) 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 (COMPASS) 2025
arxiv.org/abs/2502.00474

Talks & Presentations

Machine Learning Image Based In-Stream Water Flow Classification
Presentation at the weekly colloquium of Connecticut College Summer Science Research Institute.
Poster presentation at Connecticut College's 2024 All-College Symposium.

Honors & Awards

Summer Science Research Institute — Summer 2024
Awarded $4,000 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.

Teaching Experience

Teaching Assistant & Grader — Spring 2024 - Present
Connecticut College, New London, CT
- COM110: Introduction to Computer Science — Spring 2024 - Present
- COM212: Data Structures — Fall 2024 - Present

Departmental Service

Connecticut College CS Student Advisory Board, Diversity Chair — Fall 2024 - Present

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)