Derin Gezgin

Contact Information

dgezgin@conncoll.edu
deringezgin.github.io
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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: Dr. Ozgur Izmirli & Dr. Yan Zhuang

Research Experience

Software Engineering Group & ASSET Center for AI-Enabled Systems — May 2025 - Present
Undergraduate Student Researcher, *Cornell University & University of Pennsylvania*
- Advisors: Dr. Saikat Dutta & Dr. Mayur Naik

Autonomous Agent Learning Lab — July 2024 - Present
Undergraduate Student Researcher, *Connecticut College*
- Advisors: Dr. Gary Parker & Jim O'Connor

Informatics Lab — May 2024 - Present
Undergraduate Student Researcher, *Connecticut College*
- Advisor: Dr. Timothy Becker

Publications

[1] ***Evolutionary Optimization of Deep Learning Agents for Sparrow Mahjong***
Jim O'Connor, **Derin Gezgin**, Gary B. Parker
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment, 2025
arxiv.org/abs/2508.07522

[2] ***Playing Atari Space Invaders with Sparse Cosine Optimized Policy Evolution***
Jim O'Connor, Jay B. Nash, **Derin Gezgin**, Gary B. Parker
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment, 2025
arxiv.org/abs/2508.08526

[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

[4] ***SCOPE for Hexapod Gait Generation***
Jim O'Connor, Jay B. Nash, **Derin Gezgin**, Gary B. Parker
IJCCI Conference on Evolutionary Computation and Theory and Applications, 2025
arxiv.org/abs/2507.13539

[5] ***Evolving Neural Controllers for Xpilot-AI Racing Using Neuroevolution of Augmenting Topologies***
Jim O'Connor, Nicholas Lorentzen, Gary B. Parker, **Derin Gezgin**
IJCCI Conference on Evolutionary Computation and Theory and Applications, 2025
arxiv.org/abs/2507.13549

Talks & Presentations

Machine Learning Image Based In-Stream Water Flow Classification
- Poster presentation at Northeast Aquatic Biologists Conference
- Oral presentation at the colloquium of the Connecticut College Summer Science Research Institute
- Poster presentation at Connecticut College's 2024 Fall Weekend
- Oral presentation in ACM COMPASS 2025

Evolutionary Optimization of Deep Learning Agents for Sparrow Mahjong
- Oral presentation at Computer Science Department research seminar at Connecticut College

Sparse Cosine Optimized Policy Evolution

- Oral presentation at the colloquium of the Connecticut College Summer Science Research Institute

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 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
COM219: Computer Organization	Fall 2025 - Present
STA207: Advanced Regression Techniques	Fall 2025 - Present

Serve as Introduction to Computer Science TA Manager to coordinate the TAs and session scheduling
Accumulated over 330 hours of service

Service

ACM COMPASS 2025 Organizing Team July 2025
Student Volunteer

Connecticut College Computer Science Student Advisory Board August 2024 - May 2025
Diversity Chair

Skills

Programming Languages: Python, Java, R, MATLAB, LaTeX, CodeQL, Scheme
Libraries: PyTorch, TensorFlow, Scikit-learn, NumPy, Jax, Pandas, MatplotLib, Pgx
Languages: English (Fluent) & French (Fluent) & Turkish (Native)

Coursework

Introduction to Computer Science	Data Structures	Computer Organization
Web Technologies & Development	Algorithms	Artificial Intelligence
Computer Vision	Computational Intelligence	Introduction to Statistics
Advanced Regression Techniques	Statistical Computing with R	Statistical Consulting
Calculus II	Discrete Mathematics	Probability