

Lyle Goodyear

Stanford Computer Science Theory Undergraduate
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EDUCATION

Stanford University 2022 - 2026
Bachelor's of Science in Computer Science, Theory Track (Pursuing) Stanford, CA
GPA: 3.976

RESEARCH EXPERIENCE

Research Assistant June 2024 - Current
Stanford MS&E Department Stanford, CA

- **LLM agents for economic games:** Using LLMs to simulate realistic human economic behavior in multi-agent games. Built LLM-powered agent-based model of network congestion, represented LLM agent decision process as a graph.
- **LLMs for clinical messaging:** Improving doctor-patient messaging using LLMs, part of Stanford Medicine's 4T study. Created pipeline to generate messages, evaluate reading level and sentiment.
- Advised by MS&E faculty Ramesh Johari [↗](#), mentored by ICME Ph.D. candidate Rachel Guo

Supervised Undergraduate Research Jan 2024 - June 2024
Computer Science Research Stanford, CA

- **Benchmark for autonomous scientific discovery agents:** Built benchmark to assess LLMs in model building and experiment design; implemented probabilistic models in Python, built LLM-powered applications

COURSEWORK

Mathematics & Statistics:

Linear Algebra and Matrix Theory Probability for Computer Scientists Multivariable Calculus
Causal Inference Mathematical Foundations of Computing

Computer Science & Economics:

Matching and Market Design (Graduate) Theory of Computation Programming Abstractions
Algorithmic Game Theory Quantum Computing
Design and Analysis of Algorithms Operating Systems

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, Java
Libraries: NumPy, SciPy, Pandas, PyMC, LangChain/LangGraph
Other: Git, \LaTeX

OTHER EXPERIENCE

Robotics Team Captain & Lead Programmer 2017 - 2022
Fellowship of the Robot, FTC 13072 Kerrville, TX

- Advanced to FIRST International Championship in Houston twice, ranked 27 out of 7000 worldwide
- Won Rockwell Collins Aerospace Innovate Award, Control Award, Inspire Award, Motivate Award
- Implemented PID control systems in Java

Non-Profit Co-Founder [↗](#) 2017 - 2022
Kerrville Robotics Alliance Kerrville, TX

- Co-founded 501(c)3 educational non-profit supporting 17 robotics teams, 50+ volunteers, and 200+ students
- Fundraised and secured grants totalling over \$35,000, organized two robotics competitions at Schreiner University

Federal STEM Education Funding Advocate June 2021
Student Association for STEM Advocacy Remote

- Presented to the offices of US Representative Chip Roy and Senator Ted Cruz
- Advocated increased funding for Student Support and Academic Enrichment Grants (Title IV-A) of the 2022 appropriations bill; Title IV-A funding increased \$85 million over the 2021 fiscal year following SASA conference

CERTIFICATIONS

Retrieving, Processing, and Visualizing Data with Python [↗](#) Oct 2021
Coursera