

# Jacob Stavrianos

Stanford University, Senior

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## Education

- 2019 - 2024 **Stanford University**, Palo Alto, CA, Class of 2023.  
GPA 3.700, Intended Math major + CS coterm
- 2015 - 2019 **Montgomery Blair High School**, Silver Spring, MD, Class of 2019.  
Mathematics, Science, and Computer Science magnet program

## Work Experience

- 2022 Summer **Jane Street Capital**.  
Used Python and Excel to measure betas between financial products; used Bloomberg and SQL to analyze participation in ECM events
- 2021 Summer **Five Rings Capital**.  
Completed a research project under the mentorship of a full-time Quantitative Researcher; competed against other interns in training games
- 2020 Summer **Openproof Foundation**.  
Developed web applications for Openproof software packages, worked with Javascript and HTML+CSS frontend, collaborated with a team of undergraduate students
- 2019 Summer **ASR Analytics**.  
Developed a graph-based recommender engine to inform IRS tax compliance interventions; gained practical experience with a modern software development toolchain

## Research/Extracurriculars

- 2021 Winter - **Stanford Existential Risks Initiative**.  
Spring Researched the Outer Alignment problem under the mentorship of Alex Turner, extended Turner's definition of POWER to multi-agent games
- 2020 Winter **Math Directed Reading Program**.  
Studied *Algebraic Topology* by Hatcher under the mentorship of Joseph Helfer, gave a talk presenting my research to the program participants
- 2018 Summer **University of Maryland REU (Research Experiences for Undergraduates) program**.  
Collaborated with undergraduate students to research the Hadwiger-Nelson problem under Dr. Clyde Kruskal; co-authored an article in *Geombinatorics* detailing our results

## Achievements/Awards

- 2019 **USAMO (USA Math Olympiad) Top 50 Nationwide**.  
○ Two-time qualifier for USAJMO (USA Junior Math Olympiad)
- 2016 **University of Maryland Mathematics Competition: 2nd place overall individual**.  
○ Won a 4-year scholarship to UMD and a cash award

## Relevant Coursework

- Mathematics (multivariable calculus, linear algebra, game theory, familiar with many fields)
- Computer Science (core classes, artificial intelligence + machine learning)

## Computer Skills

Programming Python (and data science applications), Java, Javascript/CSS, C++, R, MATLAB, Lisp  
Software Unix + Shellsript, Git, Conda, L<sup>A</sup>T<sub>E</sub>X, Vim