

RYAN CATULLO rcatullo@stanford.edu | (540) 604-6019 | he/him/his

EDUCATION

Stanford University

School of Humanities & Sciences

- Candidate for Bachelor of Science in Mathematics
- Cumulative GPA: N/A

Stanford, CA
June 2025 (expected)

Riverbend High School

- Cumulative GPA: 4.500/4.500 (unweighted)
- SAT: 1550 (Math 800, EBRW 750)
- Class Rank: 1

Spotsylvania, VA
September 2018 - June 2021

RELEVANT COURSEWORK

Math

- Math 61CM (Multivariable Calculus, Linear Algebra), Groups and Rings, Fundamental Concepts of Analysis, Polya Problem Solving Seminar
- Math 62DM (Finite Fields), Math 63DM (Probability and Random Processes), Galois Theory, Introduction to Topology and Geometry, Modules and Group Representations, Algebraic Geometry (expected completion before Summer 2022).

Computer Science

- AP Computer Science A and AP Computer Science Principles - score of 5 on both exams.
- High level of coding proficiency in Python, C++, Java, R, HTML, and Javascript.

EXPERIENCE

AI Research - University of Mary Washington

September 2020 - June 2021

- Developed a frog call classifier that turned audio files into Mel Scale spectrograms and trained a convolutional neural network on the images.
- Learned to use regularizers and standardize data to reduce overfitting and achieve 98% final training accuracy and 94% final validation accuracy.

SUMO - Stanford University Mathematics Organization

September 2021 - Present

- Participated in a directed reading project on Algebraic Curves and Riemann Surfaces by Rick Miranda under the supervision of Stanford mathematics graduate student Libby Taylor.
- Will give a presentation on Riemann surfaces at a colloquium in December.

Writing in the Major - Stanford University Mathematics

September 2021 - Present

- Wrote an expository paper on Iwasawa's Criterion and the simplicity of the projective special linear group over finite fields for Groups and Rings.
- Wrote an expository paper on Fourier series for Fundamental Concepts of Analysis.