

Dual-enrolled ECHHS-NCSSM high school student looking to engage with the world through his passion for music and thoughtful problem-solving in scientific research.

EDUCATION

East Chapel Hill High School, Chapel Hill, NC

Class of 2021

- 4.0 unweighted GPA
- Nine cumulative AP enrollments; all fives on AP exams.
- President and reinstater of multiple clubs.
- **Relevant courses-**
 - AP Physics C: Mechanics and E&M, AP Biology, AP Computer Science A, AP Calculus BC, AP Statistics
 - Included laboratory experience: running gels, micropipetting, precise measuring, etc.

North Carolina School of Science and Math, Durham, NC; Online

Class of 2021

- Honors Molecular Genetics
- Research: Engage to Impact.
- Honors Nanotechnology and Research

RELEVANT EXPERIENCE

Research at Summer Ventures in Science and Mathematics (SVSM) at UNCW

2019 summer-

- Modeled and analyzed a novel solution to malaria involving the replacement of existing, wild mosquitoes with transgenic mosquitoes incapable of carrying malaria.
 - Awarded NCISC finalist, alternate Catalyst award, and 1st prize at NCSEF Regionals.
 - Presented at NSF-REU & SV Summer Research Showcase and statewide SNCURCS conference.
 - Working towards publication in the North Carolina Journal for Mathematics and Statistics (NCJMS).

East Math Team Co-President and East Science Bowl Team President, ECHHS, NC

2019-

- Led practices, taught lessons, brought teams to competitions, communicated with supervisors, and completed organization-logistical tasks.
- Currently co-founding a NCSSM-ECHHS-sponsored annual Science Bowl Tournament for middle schoolers to further STEM in NC.

SKILLS & AWARDS

• Engaging in thoughtful inquiry

- North Carolina International Science Challenge (NCISC) Finalist for the chance to represent the USA at int'l Beijing Youth Science Creation Competition.
- Alternate Catalyst Award winner of site's SVSM program.
- 1st prize NC Regional Science/Engineering Fair.

• Working effectively with dedication

- 1st prize ECU Senior Young Artist Competition; ECU Artist Series performance; (1000\$)
- 1st prize American Protégé International Music Talent Competition; performance at Carnegie Hall.
- 1st prize in Chapel Hill Philharmonia Concerto competition; soloist in season finale; two publications in Chapel Hill magazine.
- Arthur Fraser Int'l Piano Competition finalist; prestigious SEPF piano festival participation on scholarship.
- Top prizes and honors in MMTA, NCMTA, MTNA, Steinway, YAA, Nakari, UNC-SA, Winston Salem Symphony, Cameron (R. Sachs) Int'l ... competitions.

• Finding quick, sharp solutions

- 1st place NC A&T University Lvl 3 Math Contest.
- 2019 Compr. State Math Contest Qualification.
- 4th place Harvard-MIT Mathematics Tournament Team Round (Nov.).
- American Invitational Mathematics Exam (AIME) Qualification
- 2019 Nationals Speech and Debate Tournament Qualification in Policy Debate category.

• Frequent use and experience in

- **Latex, HTML5, CSS, JS** - used for the majority of my research communication products (posters, papers, etc.) and web development projects.
- **Mathematica, Maple, Excel, Python** - used for running numerical mathematics, image processing, etc.
- **Java** - used in AP Computer Science A to explore basic programming concepts.