Natalie Bretton

- 8 year FIRST Robotics participant
- 3 years as FIRST Robotics Competition participant currently the Mechanical Fabrication Lead and Pit Crew Lead

Natalie G. Bretton 806 Lancaster Lane Newport News, VA 23602

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EDUCATION

Math Background -

Have generally tracked 2 years ahead of TAG students in math, taking Algebra 1 in 5th grade and AP Calculus BC in 9th grade. Received all A's in all my classes each year.

Menchville High School Sophomore – *Rank* 1, 4.5 *GPA*, *Class of* 2021 Have completed complete all high school math requirements and then some, including AP Calculus BC and AP Statistics. Currently taking, or have completed, AP Computer Science Principles, AP Physics 1, AP Biology, AP World History, AP Human Geography, Honors Spanish III & Basic Technical Drawing. All A's every year.

LEADERSHIP EXPERIENCE & ORGANIZATIONS

FRC Team 2363 Triple Helix Robotics – Mechanical Fabrication & Pit Lead September 2017 – Present

Responsible for mechanical design and building of the robot, training mechanical sub-team members, and debugging robot mechanical problems under pressure as the pit crew lead during competitions. Experience using machine shop tools, including mill, lathe, drill press, mitre saw, band saw, hand drills, soldering, belt sanders, dremels, angle grinders, etc. For 2019, we won the NOVA competition and were semi-finalists at the HRVA competition. In addition, we have received the Engineering Inspiration Award (FIRST's 2nd highest honor) and the Creativity Award. Triple Helix has advanced to the FIRST World Championship the previous 5 years!

Virginia Space Coast Scholars Participant - December 2018 - March 2019

The Virginia Space Coast Scholars (VSCS) program is a dynamic, informal online learning experience for high school sophomores. With a focus on scientific exploration, students will be introduced to the science, engineering, and technology concepts that are integral to earth and space-based missions launched or conducted from Virginia's Space Coast on the Eastern Shore. Students who successfully complete the online course *may* be invited to attend a seven day, residential summer academy at Wallops Flight Facility.

National Spanish Honor Society Member — 2018 - Present

National Junior Honor Society Member — 2017 - Present

Triple Helix Robotics Camp Counselor — *July /August* 2015, 2016 One of several camp counselors teaching 5th-8th graders LEGO Mindstorm and VEX robotic programming.

REFERENCES

HONORS & AWARDS

MHS Top Ranked Student for 9th & 10th grade President's Education Award for **Outstanding Academic** Excellence (every year) 8th grade Science, Spanish, PE & Marine Science Awards National Junior Honor Society 2nd place in BTW MS Science Fair for IoT Environment Project 1st Place Rotary Club special award at City Science Fair for IoT Environment Project Jewish Community Center **Holocaust Writing Award** VA House of Delegates Certificate of Distinction

VOLUNTEERING & STEM

Weekly Volunteering at Bluebird Gap Farm, 2016 - present Summer Volunteer at BTW Middle School for Marine Science Tank Maintenance, 2014 - 2018 Fence Building for Bluebird Gap Newport News Landfill Prototyping Counselor for Triple Helix RoboCamp, 2015 & 2016 Rumble in the Roads Volunteer CNU STEM day Volunteer NNPS SAGE Expo Volunteer NAS Oceana Air Show Demo Hampton Roads Mini Maker Faire Demo CHROME Club demo Lewis Ginter Gardens demo NN Fall Festival of Folklife Outreach

ATHLETICS & INTERESTS

8 Years of Competitive Gymnastics Recreational Soccer Running Drawing Special Effect Makeup Artistry Building & Creating Guitar Piano Brandon Traner, AP Calculus BC and AP Statistics Teacher, 275 Menchville Rd, Newport News, VA, 23602 Phone: 757-886-7722, ext 45123

Michael Shumate, AP Computer Science & Marketing Teacher, 275 Menchville Rd, Newport News, VA, 23602 Phone: 757-886-7722, ext 45301

Wardell Boyle, Technology Education Teacher, 275 Menchville Rd, Newport News, VA, 23602 Phone: 757-886-7722, ext 45302