

When Triple Helix Robotics first met 4th-grade Natalie Bretton, she couldn't wait for the chance to join our team. When her parents and older brother became team members, she found opportunities to get involved too. We wrote about 6th-grade Natalie in our 2015 Chairman's Award essay, introducing readers to this student who "loves robots, wants to be an electrical engineer, and is often present as we are building our robot," exemplifying the growing success of our team's community outreach program. She made it easy to visualize a promising future of our team as a producer of capable young student leaders.

Our team couldn't wait for Natalie to join either, and we invited 8th-grade Natalie to become our first-ever redshirt freshman. In her entry questionnaire she promised: "I'll work hard and try to learn everything I can." Since that time, through her involvement in the FIRST Robotics Competition, Natalie has fulfilled that promise, growing into an outstanding student leader who consistently demonstrates a passion for FIRST ideals, an active and compelling leadership style, and a selfless dedication which every Triple Helix student and mentor tries to model.

Natalie always demonstrates remarkable professionalism, sense of responsibility, self awareness, and emotional intelligence that sets her apart from her peers. Peers and mentors regularly applaud her work ethic, and she constantly proves herself open to new responsibilities. A student co-captain celebrated her first-year contributions, reporting that Natalie "is passionate about engineering, and makes a point to attend every outreach event possible, and was often seen happily engaging young kids with robots at demos and RoboCamp. She is a huge participant in everything we do, has a fundamental role on the team, advances respect for engineering in the next generation, and she is not even a high schooler [yet]!"

Concurrent with her full-time job as a dedicated and high-performing high school junior, Natalie is an enthusiastic ambassador for FIRST and has been a frequent contributor to Triple Helix's 200+ community outreach and resource shares over the past 4 seasons. Natalie's standout contributions include serving as the point of contact for an ongoing collaboration with our school district's Assistive Technology Coordinator. Our team's role in this collaboration is to adapt low-cost toys to connect to accessible switches, enabling students with disabilities to learn cause-effect relationships by triggering the toys' functions. Natalie also organized an introductory meeting (2019) with both the National Institute of Aerospace and the Tuskegee Airmen Tidewater Chapter, creating opportunities for future collaboration with these nonprofits.

Natalie makes essential individual contributions to both person-to-person and wide-reaching outreach. With her dad Natalie built a self-balancing Lego robot, our most attention-grabbing demo. She was a camp counselor for our 5th-8th grade RoboCamp (2016-17), met hundreds over 2 days at the Langley AFB airshow Airpower Over Hampton Roads (2018), and served dinners at the Junior Womans Club of Hilton Village's annual dinner theatre (2017-18). Natalie has taught many young students how to drive and operate our robots (Community STEM Day 2016-19, Cooperating Hampton Roads Organizations for Minorities in Engineering Club 2017-18, etc).

Now our Mechanical-Fabrication task group leader and our pit crew captain, Natalie reached her current leadership roles after first gaining significant technical and project management experience. Other roles include Airship Pilot (2017) and Human Player (offseason 2016). Throughout her involvement, Natalie is a gracious professional, integrating well with her team to do work of the highest caliber, with great positive impact on the team's success and sustainability. Natalie will have a prosperous career as a science and technology leader and innovator, and will be an exemplary member of the 2020 FIRST Dean's List.