# Lydia Xing

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#### **EDUCATION**

Brookline High School

• Year of graduation: 2018

#### INTERESTS/ACTIVITIES

- FIRST Robotics Team 125 NUTRONS: programming captain September 2015 present
  - Developed Android trajectory app that won team Innovation in Control Award at Arizona Regional, 2016
  - o Implemented PID controllers for self-correcting and computer vision targeting
  - o Robot ranked #18 worldwide in 2016, #12 worldwide in 2017
  - Carson Division champions at St. Louis World Championship 2017
  - o One of two Dean's List Award nominees
  - Robot operator/drive team
  - o Conducted Chairman's award presentations
- MetroHacks Board: co-director of sponsorship
  September 2017 present
  - Contacted companies for funding, managed branding and budgeting for largest New England high school hackathon

| • | MIT Launch Club: founder, captain                         | September 2017 – present |
|---|---|--------------------------|
| • | Computer Science Club: founder, captain                   | September 2016 – present |
| • | Math Team: captain  | September 2014 – present |
| • | Brookline Teen Center: Makerspace Committee member        | September 2016 – present |
| • | BHS Advanced Chamber Orchestra: 2nd violin section leader | September 2017 – present |
| • | Brookline High School Orchestra: violinist                | September 2014 – present |

#### **EXPERIENCE**

Founder, Director, June 2016 — present

Brookline Middle School Robotics Program, Brookline, MA

- Recruited and trained volunteers
- Secured space, funding, developed curriculum and daily agendas
- Taught students to use Lego robots and Arduinos
- Ran pilot summer workshop and raised funding for First Lego League teams
- Founded two First Lego League teams, serving 20 kids total
  - o Won Strategy and Innovation award at 2016 Revere FLL Qualifier
- First community lego robotics program
- Waivered fees for students in need

## Student, July 2017 - August 2017

### MIT Beaverworks RACECAR, Cambridge, MA

- Gained experience in ROS, Gazebo, OpenCV
- Learned about various control systems: PID, pure pursuit, Monte Carlo localization, local and global potential field controllers, AR tracking, and principles of localization and pose estimation
- Won best safety controller and 3rd place in Grand Prix

#### **AWARDS**

- 2017 Brookline Youth Recognition Award
- 2017 Rhode Island District Dean's List winner
- 2017 NCWIT Massachusetts winner
- 2017 St. Michael's College book award winner