

YAJIE LI

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Willow School (2021-2025):

Four-year engineering and biomedical science program integrating math, science, engineering and technology through project-based learning.

- **Honors and Awards:** AP Scholar with Distinction, National Honor Society, National Society of High School Scholars.
- **Relevant Coursework:** Calculus I and II (Tulane University courses), Psychology Applied to Work (Tulane University course), English Composition (Currently taking, Tulane University course), AP Biology, AP Chemistry, AP Physics C: Mechanics.
- **Research Projects:**
 - **Engineering Senior Project:** Designing a robot arm that can sync up and control with a device attached to a person's arm. The purpose is to reduce the shaking of the arm during intricate tasks. My future plan is to have the device directly attached to the arm to minimize tremors caused by diseases such as Parkinson's Disease or to perform intricate tasks.
 - **Biomedical Science Senior Research Project:** Research on environmental factors' effect on the fermentation rate of yeast and finding the ideal condition for the maximum fermentation rate.

Activities:

- **Willow School Robotics Team (Freshman-senior year):**
 - Team captain (2024), lead programmer (2022, 2023, 2024), lead 3D modeler (2022, 2023, 2024), founding member (2021).
 - Won Louisiana Regional Championship in 2021, 2022, 2023.
 - Control Award (2022, 2023): Recognizing the team making the best use of sensors and control of their robot; sole programmer during those years.
 - Design Award (2023): Recognizing "the team that demonstrates industrial design principles, striking a balance between form, function, and aesthetics."
 - Competed in the FIRST Robotics World Championship in 2021, 2022, and 2023.
- **National Honor Society (Junior-senior year):**
 - Assist in school beautification projects and fundraising for a sick teacher.
 - Tutor students in fresh honors physics and algebra.
- **JV Baseball (Freshmen-sophomore year):**
 - Played right and left field on the school's JV baseball team for two years.
- **Piano (2013-present)**

Volunteering:

- **Second Harvest Food Bank:** Packaged and sorted food for needy families.
- **Church Vacation Bible School:** Assisted in the classroom.
- **Willow High School:** Volunteered at open house, crawfish boil, and engineering fair.

Skills:

- **Technical Skills:** Experienced with CAD software, 3D modeling, and operating various tools such as 3D printers, laser cutters, CNC machines, and power tools.
- **Laboratory Skills:** Proficient with lab equipment, lab safety, handling chemicals, and experimental design.
- **Web Design:** Proficient with Bootstrap Studio, WordPress, HTML, and CSS.
- **Programming Languages:** Proficient with Java, C++, and Python.
- **Electrical Engineering:** Proficient in electrical circuit design and soldering.

Interests: Biking, going to the gym, 3D modeling and printing, working with electronics, cooking and baking, airplanes and spacecraft, geopolitics, watching science and engineering videos, and listening to the news.