Bryce Dreyer

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Education

Glencoe High School - Senior, Class of 2025

- Unweighted GPA 4.0, Weighted GPA 4.13
- Noteworthy Courses: AP Human Geography (2022), AP Statistics (2023), AP Biology (2024), AP Calculus BC (2025), Principles of Engineering (2024), AP English Language and Composition (2025), Aerospace Series (2022 - 2025)

Senior Design Project

Engineering Career and College Pathway (CCP)

Summer 2024 - Spring 2025

- Designed a robot to accomplish a set of goals for a game that I created
- The mechanical design of the robot was done in Fusion 360, and was constructed out of custom carbon fiber parts and 3D prints
- A brushless DC motor driver and system motherboard schematic and electrical board layout was done in Fusion 360 PCB and fabricated by JLCPCB
- Servos and motors were controlled by an FPGA running custom Verilog
- Software was a combination of C++ running on an ESP32 and Python running on an Orange Pi 5 Pro

Activities

FIRST FRC Robotics Team Shockwave (4488), Glencoe - Team Captain, Lead Electrical, Design, Technician, Safety Captain

Fall 2020 - PRESENT

Tennis Team, Glencoe

Spring 2022, Spring 2025

Honors

National Honors Society, Glencoe

Spring 2023 - PRESENT

FIRST FRC Robotics Team Shockwave (4488), Glencoe

Dean's list semifinalist 2024

Work Experience

HOA Pool, Jackson School HOA - Pool Maintenance

Summer 2023, Summer 2024

 Was responsible for maintaining chemical balance (chlorine, pH, alkalinity) and filter systems for the 2 pools maintained by the HOA. Responsibilities also included general pool maintenance, and ensuring the pools were compliant with state safety codes for residents to enjoy.

Volunteer Experience

Go Baby Go 2020 - 2024

• This is a program where we take children's toys off the shelf and modify them to be more accessible for children with motor skill challenges. The toy is modified to be activated through a large red button, and is then wrapped in its original packaging. The toys are then collected and distributed to the children for Christmas.

Airshow 2022 - 2025

As part of our Aerospace program, we volunteer at the Oregon International Airshow.
Duties include running a STEAM event for middle schoolers, and helping run the event in whatever capacity is needed.

FIRST Lego League Judge 2024

Participated as an innovation project judge for the Jones Farm FLL challenge.