

Aidan Peter

Objective

Striving to be a compassionate global citizen, to help design and develop technologies to make our world a better place. Motivated to apply my skills and capabilities to be a team player and do my very best in any task assigned.

Education

- Senior in Basis Independent Fremont
 - GPA - 3.98, Weighted GPA - 4.74
 - SAT: 1550 (800 Math, 750 Writing)
 - PSAT: 1490/1520
- Relevant APs
 - Computer Science Principles (5), Computer Science A (5)
 - Calculus BC (5), Physics 2 (4), Physics C Mechanics & Electromagnetism (5)
 - Macro Economics (5), Micro Economics (5), Statistics (5), Psychology (5), 2D Art & Design (5)
 - AP Lang (5), AP World History (5), APUSH (4), AP US Government & Politics (5)

Skills

- Python, Java, C
- Procreate, Adobe Photoshop, Fresco
- EagleCAD
- Arduino, RaspberryPI
- TinkerCAD, Cura
- Matlab

Awards and Accomplishments

Academic

- National Merit Scholarship Semifinalist
- AP Scholar with Distinction
- HSRC (Harvard Science Research Conference) - First Place in Innovation Challenge
- President Award for Academic Excellence

Leadership

- Eagle Scout (Boy Scout of America)
- Congressional Award Silver Medal
- Vice President of National Honor Society
- Senior Patrol Leader at National Youth Leadership Academy
- Senior Patrol Leader & Scribe of Boy Scouts Troop 152

- Volunteer of the Year 2021 - Infuse (NonProfit for kids on the spectrum)
- Founder & Captain of BASIS American Rocketry Club
- BASIS Student Panel founding member

Art and Design

- Dunning Fellow Award in Automotive Design
 - Earned full scholarship for 4 weeks of Automobile Design Course(credited) at College of Creative Studies, Detroit.
- Stellantis Drive for Design Competition - Honorable Mention
- Scholastic Gold key, Silver Key Award for Art, Honorable Mention
- State Winner in California Coastal Art Competition
- 2x National Winner for Saving Endangered Species Youth Art Competition
- School Mascot Designer, YearBook Cover Contest Winner

Employment - Zero Emission Industries (May 2023 - Present)

- Team and Project Overview:
 - Engineering Team
 - Building the world's first hydrogen-powered speedboat
- Individual Contributions:
 - Fiberglassing Structural Components
 - Executed fiberglassing on structural components post-CAD modeling
 - Hydrogen Tank Design and Fitting
 - Designed and fitted a 10-foot hydrogen tank
 - Utilized rapid prototyping to incorporate flexibility for the boat's structure
 - Switch Panel Construction
 - Constructed switch panels for fuel cell operations and testing
 - Dashboard Cluster and User Interface Programming
 - Programmed the dashboard cluster
 - Developing the user interface design for efficient boat operation

Summer Programs

- COSMOS UCSC Smart and Sustainable Power (CSE & EE Dept)
- NYLT Leadership Academy in West Virginia (scholarship sponsored by BSA)
- Stanford Product Design
- Columbia Introduction to Entrepreneurship
 - Received "Most Likely to Succeed" product award
- Intern at Piloty City, San Leandro (Remote)
 - OptiViro - Developed Sony IFFT sensors based Smart Climate Control System
- Intern at Seed Studio (Remote)
 - Trained in developing 2 layer PCBs for electronic circuits
 - Electronics assembly and soldering of simple circuits
- Developed an automated home climate control system
 - PCB design using Eagle CAD

- Assembled sensors and connectors to integrate with Raspberry Pi
- Developed Python based software and GUI

Personal Projects

- Smart Pillbox
 - 3D printed pill box with medication reminder
 - Used Adafruit Circuit Playground and Colour E-ink Display
- OptiViro Climate Controller
 - Smart-home controller using weather data in sync with sensors (temp, humidity, & light)
- Bladeless Drone
 - Developing proof of concept leveraging off the shelf components
 - Sketches ready. Prototyping in progress
- Toroidal Drone
 - Collaborated with MIT Lincoln Laboratory to develop novel toroidal propeller drone
- Automated Electric Car Charger Prototype
 - Computer vision (Huskylens), ultrasonic sensor, & homemade robotic arm w/ servos
- MagLev Train Prototype
 - R&D maglev train prototype using electromagnetic coils & permanent magnets
- Smart Tag
 - Developing a rugged inexpensive smart display tag
 - Concept and enclosure design completed. Prototyping in planning stage

Volunteer and Community Service

- Summer Art Camp for neuro-divergent kids
- Weekly volunteering with church ministry in making food bags for homeless
- Team member in assembling and installing a temporary shelter base using shipping crates for the homeless helpful during cold and rain. Featured in Tri City Voice newspaper.
- Community project member in making native tree seed balls to promote reforestation. Designed a smart tool for faster seed ball making
- Eagle Scout project - Developing face shields for volunteers for American Red Cross during Covid pandemic
- Inspiration and lead artist for “Aliens” 8’x12’ mural at school involving students and staff

Clubs

- Rocketry Club, National Honor Society, School Student Panel, Key Club

Hobbies and Interests

- Sketching and painting - automotive, nature, portrait, doodling
- Product Design - tinkering, ideation, sketching, prototyping, 3D printing
- Hiking and Rock Climbing