

## Aaryan Agrawal

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|-----------------------------------|--|--|--|--|
| <b>Profile</b>                    | Motivated high school senior with experience in robotics, data science and machine learning. Collaborative and reliable. Able to quickly learn and adapt to workplace environments.  |  |  |  |
| <b>Skills &amp; Abilities</b>     | <ul style="list-style-type: none"><li>• Communication, public speaking, organization</li><li>• Python, Java, JavaScript, SQL</li><li>• Data analysis, machine learning, neural networks</li><li>• Vision processing, OpenCV</li></ul>  |  |  |  |
| <b>Work Experience</b>            | <b>Lockheed Martin Solar &amp; Astrophysics Laboratory, Palo Alto, CA</b>  | <b>September 2020 - Present</b>  |  |  |
|                                   | <b>IRIS Data Analyst</b>   |  |  |  |
|                                   | <ul style="list-style-type: none"><li>• Worked with data from IRIS satellite</li><li>• Developed K-means clustering algorithm for sunspot emission spectra</li><li>• Generated comprehensive dataset of sunspot atmospheres and magnetic fields</li></ul>  |  |  |  |
|                                   | <b>Castlight Health, San Francisco, CA</b>   |  |  |  |
|                                   | <b>Engineering Intern</b>  | <b>Summer 2020</b>   |  |  |
|                                   | <ul style="list-style-type: none"><li>• Used topic modeling (LDA) to group and understand comments from user surveys</li><li>• Analyzed and graphed user search database to find trends and improve results</li></ul>  |  |  |  |
|                                   | <b>Engineering Intern</b>  | <b>Summer 2019</b>   |  |  |
|                                   | <ul style="list-style-type: none"><li>• Used open-source tools to generate relational diagrams of databases; provided web interface that any engineer could access</li><li>• Implemented Python tooling to automatically fetch and graph monitoring routines</li></ul>   |  |  |  |
|                                   | <b>Education</b>   | <b>Gunn High School, Palo Alto, CA</b>                                   |  |  |
|                                   |  | Expected Graduation: June 2021<br>Unweighted GPA: 4.0; Weighted GPA: 4.3 |  |  |
| <b>Relevant Coursework</b>        | AP Computer Science A<br>Engineering Technology (Gunn Robotics Team)<br>AP Chemistry, AP Physics C, AP Calculus BC   |  |  |  |
| <b>Extracurricular Activities</b> | <b>Gunn Robotics Team, Palo Alto, CA</b>   | <b>Fall 2019 – June 2021</b>   |  |  |
|                                   | <b>Controls Subgroup</b>   |  |  |  |
|                                   | <ul style="list-style-type: none"><li>• Wired all electrical components and CAN bus</li><li>• Spearheaded computer vision initiative, created entire OpenCV processing pipeline</li><li>• Trained convolution neural network to track balls on field and autonomously move to them</li><li>• Prepared and delivered electronics lessons to new members</li></ul> |  |  |  |
|                                   | <b>Gunn Cryptology Club</b>  | <b>Fall 2019 – June 2021</b>   |  |  |
|                                   | <b>Vice President</b>  |  |  |  |
|                                   | <ul style="list-style-type: none"><li>• Co-organized and publicized Great Cipher Challenge, a national cryptology competition</li><li>• Developed website and backend, including scoring system and leaderboard</li></ul>  |  |  |  |
|                                   | <b>Wave Learning Festival</b>  | <b>Fall 2020</b>   |  |  |
|                                   | <b>Teacher</b>   |  |  |  |
|                                   | <ul style="list-style-type: none"><li>• Created and taught Data Analysis with Python class</li><li>• Made Jupyter notebooks for every class session for full interactivity</li></ul>   |  |  |  |
|                                   | <b>Gunn Badminton Team</b>   | <b>Spring 2018 – Spring 2020</b>   |  |  |
| <b>Varsity</b>                    | <ul style="list-style-type: none"><li>• Participated in 14 matches per year in highest Bay Area team division</li></ul>  |  |  |  |