# Jet Propulsion Laboratory Summer High School Internship Program "JPL SpaceSHIP"

#### Joint with the Santa Ana Unified School District

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### **2020 Internship Application**

Internship Dates: June 15 – August 7, 2020 (8 Weeks)

Application Due (postmark on or before): Monday, February 10, 2020

Submit to: Christine Rich
CTE TOSA, Room 2-6
Valley High School
1801 S. Greenville St
Santa Ana, CA 92704

Please read this entire document. As with most things in life, the first step is to read and follow the directions.

The Jet Propulsion Laboratory Summer High School Internship Program (JPL SpaceSHIP) is being conducted in collaboration with the Santa Ana Unified School District.

JPL SpaceSHIP is a high-expectations opportunity designed for high school students who have demonstrated a strong interest in, and aptitude for, science, technology, engineering and/or mathematics (STEM). Skills in computer programming and advanced mathematics (calculus) are important as is the maturity to function in an adult work environment. One of JPL SpaceSHIP's objectives is to encourage pre-college students who have been traditionally underrepresented in STEM fields to consider such fields for their careers.

Located in Pasadena, California, the Jet Propulsion Laboratory (JPL) is the leading center in the United States for robotic exploration of the solar system. JPL is a facility of the National Aeronautics and Space Administration (NASA), and administered by the California Institute of Technology (Caltech). More information about JPL can be found at <a href="http://www.jpl.nasa.gov">http://www.jpl.nasa.gov</a>.

The JPL SpaceSHIP internship is an eight-week experience with placements in science or engineering work groups supervised by a mentor. Students participating in the JPL SpaceSHIP program are provided an opportunity to do research, expand their computer skills, and enhance and develop their oral and written communication skills. Students also have an opportunity to develop and prepare written technical reports and abstracts, make a formal final presentation, interact with students from diverse cultural backgrounds and participate in numerous enrichment activities. The mentors for the JPL SpaceSHIP program are some of NASA's top science and engineering professionals. They mentor students while conducting innovative research and technology development in support of space exploration.

Expectations are high for participating students and a full commitment to the internship is expected. Prospective interns are encouraged to investigate JPL and its work to consider if this opportunity is an appropriate match with their talents and career aspirations.

During the eight-week internship students will work eight (8) hours per day (including breaks) plus a lunch period. The Jet Propulsion Laboratory has a work schedule that will give students every other Friday off (June 19, July 17, July 31) plus July 2 and 3 for the Independence Day holiday. That will result in a baseline of 280 hours.

JPL is partnering with the Santa Ana Unified School District. Some communications will be directly with Santa Ana Unified School District.

#### **Eligibility Requirements**

- Students must be U.S. citizens or Lawful Permanent Residents.
- All participants must be at least 16 years old as of the first day of the internship (June 15, 2020).
- Students must be able to communicate fluently in written and spoken English.
- Students must be between their junior and senior year (11-12 grade) at an accredited high school.
- With the exception of the letters of reference, this application must be completed by the student and represent the student's own work.
- All applicants must have a 3.0 GPA or above.
- The application must provide evidence of interest in and aptitude for science, technology, engineering, and/or mathematics.
- Applicants in engineering pathways will be given priority consideration.

Selection will be conducted by the JPL Education Office. Finalists will be interviewed prior to selection; not all students interviewed will be selected. Selected students are responsible for their own transportation to and from JPL.

#### There is no housing or transportation allowance provided by JPL.

#### Program Duration

• 8 weeks: Monday, June 15 – Friday, August 7, 2020. Interns must start on June 15.

#### Location of Internship

All internship activities take place at the Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, California 91109 unless otherwise specified. An off-site one-day bus field trip may occur to visit Caltech in Pasadena, the Goldstone Deep Space Tracking Station (north of Barstow, CA) or the NASA Armstrong Flight Research Center at Edwards Air Force Base (Antelope Valley).

Use the checklist at the end of this application to ensure the application is complete. Incomplete applications will not be reviewed.

#### **Student Information Sheet**

Please neatly print or type the following information:
Student's Name:
Citizenship:
Age/Date of Birth:  Must be at least 16 years of age as of 6/15/2020.
Home Mailing Address:
City, State, Zip Code:
Home telephone:
E-mail Address:
Cell phone number:
High School Name:
High School Address:
High School District:
<u>Are you currently (Spring '19)</u> a high school junior (11 <sup>th</sup> grade)?YesNo*
* If you checked "No" please elaborate:
Grade Point Average (Cumulative):4.0 scale, or5.0 scale
Please include most recent <b>high school transcript</b> (unofficial is okay); if there is another grade record (community college grade card for example) please attach that as well.
Please also provide <b>proof of citizenship</b> and age.  COPY [not original] of one of the following:  a. Valid/current U.S. passport (preferred document)  b. U.S. Naturalization certificate  c. Birth certificate  d. United States Permanent Resident Card

(The <u>original document</u> will be required on the first day of the internship.)

#### **300-Word Essay and 50-Word Statement of Interest**

Student's Name:	
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Essay: Describe, in 300 words or less, your interest in science, technology, engineering, and/or mathematics. What are your goals for this summer internship (i.e., what do you hope to learn, see, do, or achieve while at JPL)? What makes you a good fit for a JPL internship? What challenges, if any, have you had to overcome in order to pursue your goals or dreams?

Statement of Interest: Additionally, please respond to this question in 50 words or less: What areas of JPL's work most interest you and why? (Of course we do not expect you to have a deep knowledge of JPL but you should have some idea of the types of careers and jobs found here.)

Please attach your typed essay and statement of interest to this form.

# **Summary of Science, Technology, Engineering, and Math Courses**

Student's Name:			
ist all science, mathematics, technave taken for high school or colle		er science, and engi	ineering courses you
Science Courses:			
Course Title, (ex. AP Physics)	Year (9-11, college)	Letter Grade (or other score)	Honors, AP or College Level?
<b>Mathematics Courses:</b>			
Course Title, (ex. AP Calculus BC)	Year (9-11, college)	Letter Grade (or other score)	Honors, AP or College Level?
Computer, Technology, or E	 Engineering (	Courses:	
Course Title,	Year (9-11,	Letter Grade	Honors, AP or
(ex. Intro to Programming)	college)	(or other score)	College Level?

# **Summary of Awards, Activities, and Computer Skills**

List academic awards, achievements, or other reco	ognition received.	
Award or Other Recognition		Date/Grade Level
List your extracurricular activities (music, sports, service, volunteer work, summer programs, other	NASA-related prog	grams, etc.)
Activity	Date(s) (ex. 2017-	`
	(CA. 2017	1 months)
List your computer skills (programming language	es, databases, CG, w	ah dasian Microso
Office, hardware, etc.).		eo design, Microso
	Date(s)	Level of Expertise (beginner, intermediate
Office, hardware, etc.).	Date(s)	Level of Expertise (beginner,
Office, hardware, etc.).	Date(s)	Level of Expertise (beginner,
Office, hardware, etc.).	Date(s)	Level of Expertise (beginner,

# JPL SpaceSHIP 2020 - Letter of Recommendation #1

Student's Name:			
Name of Recommender:			
Title (i.e., Science Teacher):  How long have you known the student and in what courses?			
Recommender's Signature:	Date:		
School Administrator's Signature:	Date:		

# JPL SpaceSHIP 2020 - Letter of Recommendation #2

Student's Name:			
Name of recommender:			
Title (i.e., Science Teacher):  How long have you known the student and in what courses?			
Recommender's Signature:	Date:		
School Administrator's Signature:	Date:		

# JPL SpaceSHIP 2020

## Parental Acknowledgement / Permission Form

I,	<b>,</b>
(name of parent or guardian)	
acknowledge that my child,	
(name of child)	
is applying for the Jet Propulsion Laboratory Summer High School Internsl	hip Program
(JPL SpaceSHIP) conducted by the JPL Education Office. If accepted, my	child will
spend eight weeks participating in the 2020 Jet Propulsion Laboratory Sum	mer High
School Internship Program in Pasadena, California.	
I understand that the Jet Propulsion Laboratory is partnering with the Santa	Ana Unified
School District to provide support services for "JPL SpaceSHIP", including	g work permits
for minors, in 2020 and Santa Ana Unified School District will be in contact	et with my
child for that purpose.	
I understand that I will need to sign a "Consent, Release & Assumption of my child can begin an internship.	Risk" before
Printed name of parent/guardian:	Date
Signature of parent/guardian:	
	Date

# JPL SpaceSHIP 2020/Santa Ana USD Application Checklist

Application Due (postmark on or before): Monday, February 10, 2020

Submit to: Christine Rich
CTE TOSA
Room 2-6
Valley High School
1801 S. Greenville St
Santa Ana, CA 92704

Does your packet contain ALL of the following items?

<u>Incomplete applications will not be reviewed</u>. The teacher recommendations should be provided in sealed envelopes along with the other items.

The "Student Information Sheet"
300 Word Essay and 50 Word Statement of Interest
"Summary of science, technology, engineering, and mathematics courses"
"Summary of awards, activities, and computer skills"
Letter of Recommendation #1
Letter of Recommendation #2
High School <b>Transcript</b> ; other grade records if applicable (An unofficial transcript is acceptable)
Signed "Parental Acknowledgment/Permission" Form
Proof of citizenship and age (COPY [not original] of one of the following): a. Valid/current U.S. passport (preferred document) b. U.S. Naturalization certificate c. Birth certificate d. United States Permanent Resident Card (The original document will be required on the first day of the internship.)

If selected, a work permit may be required of interns under 18 as of June 15, 2020; Santa Ana Unified School District will be contacting students regarding work permits. Additionally, JPL will require a signed "Consent, Release & Assumption of Risk" form from interns (if 18 years old or older) or parents (of minors) before starting the internship. Further directions will be forthcoming for those selected.

You may wish to keep a copy of these items for your records. Thank you and good luck.