

## Summer 2020 Internship Projects

The list of this year's internships projects can be found below. Click on each project title to jump to a description of the project. To learn more about the National Air and Space Museum Summer Internship Program and apply, please visit [our website](#).

### WASHINGTON, DC

#### Curatorial Internships

- Military Aviation Research (Curatorial)
- Military Space Systems Database (Curatorial)
- Space History: Materializing Globalization (Curatorial)

#### Education Internships

- Astronomy Education
- Explainers Program (Education)
- Family Day Programs (Education)
- Middle School Programs (Education)
- Lecture and Public Program Planning (Education)
- Teacher Innovator Institute (Education)

#### Exhibits Internships

- Exhibits Writer/Editor
- Media Development for Exhibitions
- Project Management

#### Museum Management And Operations Internships

- Advancement and Fundraising
- Human Resources (Shared Driver Organizer)
- Logistics Department
- Visitor Services

#### Planetary Research Internships

- Runoff Production on Early Mars (Planetary Science)
- Wind Features on Mars and Science Outreach (Planetary Science)

#### Strategic, Digital, And Visual Communications Internships

- Communications and Digital
- Server/Data Management for Video Production
- Social Media for Educational Programs
- Video Production
- Web Accessibility and Inclusive Design

## CHANTILLY, VIRGINIA

### Archives Internships

Archives Collections Processing

### Education Internships

Middle School Programs (Education)

SHE Can STEM Camp in Virginia (DC-Area) (Education)

### Museum Management And Operations Internships

Visitor Services

### Strategic, Digital, And Visual Communications Internships

Marketing at the Udvar-Hazy Center

## SUITLEND, MARYLAND

### Collections Internships

Collections Processing

## OTHER LOCATIONS

### Education Internships

SHE Can STEM Camp in Bentonville, Arkansas (Education)

## WASHINGTON, DC

Internships at the National Air and Space Museum's building on the National Mall in Washington, DC.

### Curatorial Internships

#### Military Aviation Research (Curatorial)

The intern will conduct research at the National Archives and Records Administration and other repositories in support of the three new permanent military-themed galleries at the National Air and Space Museum (World War I, World War II, and Modern Military Aviation). This research will include finding still imagery, motion picture, textual, cartographic, and other graphic representations of military aviation with a primary focus on the post-1945 era. About half of the internship will consist of high-resolution reproduction for in-gallery digital use. Interns will be able to participate in exhibition design meetings and gain an inside perspective into the development of high-end permanent exhibitions with one-of-a-kind artifacts and displays.

## **Military Space Systems Database (Curatorial)**

The intern will assist in collecting information from open sources and U.S. government records on U.S. military space systems for the new Space Age gallery and for developing a resource for use in the future. These systems include the satellites, ground support elements, programs to decrease their vulnerability, and efforts to develop a capability to affect foreign space systems in times of conflict.

## **Space History: Materializing Globalization (Curatorial)**

The intern will conduct historical research and provide public programming support for a new Smithsonian-wide interdisciplinary humanities initiative called “Materializing Globalization: Documenting, Researching, and Sharing its Meanings and Impacts.” This initiative embraces a range of varied and exciting Smithsonian projects/activities, at different museums, which in different ways, speak to the topic of globalization. Reflecting the central role of collections in the Smithsonian, such stories are most powerful when told through objects. But how do we collect such objects, with what implications, or reinterpret object we already have? A critical dimension of our work will be to explore how power and human agency in different contexts of culture, race, and gender get expressed – in short, to highlight the ethical dimensions of globalization, not just broadly, but within the Smithsonian itself. As a member of the “working group” for this initiative, the intern will conduct research from a humanities perspective on the topic of globalization, especially in support of seminars and conference we are planning for 2020 and 2021.

## **Education Internships**

### **Astronomy Education**

The intern will learn about astronomy education and communication to the public while conducting daily programming in the Phoebe Waterman Haas Public Observatory and astronomy-related galleries and assisting with a teacher professional development workshop. The intern will help research, develop, and/or revise astronomy hands-on activities which reflect educational best practices, and will help train volunteers and staff to have engaging and effective conversations about science with visitors. The intern will run daily programming conducted by volunteers and student staff. The intern may maintain equipment and supplies and update digital content for the Public Observatory and astronomy-related galleries. The intern will also help develop an enrichment training session for volunteers and staff.

### **Explainers Program (Education)**

The intern will provide general program support, and must be able to work independently, handle multiple tasks at the same time, be self-starting and enthusiastic about engaging with Museum visitors. The intern will provide support for a program undergoing large scale changes. They will provide assistance to the new coordinating staff to evaluate the state for the program in its entirety as well as help implement changes to adapt to the constant changes the National Air and Space Museum is undergoing. The intern will support the Explainers Interactive Video Conference (IVC) program by coordinating program scheduling/logistical needs, providing day-of assistance and possibly presenting content to students.

## Family Day Programs (Education)

The intern will assist the Family Day Coordinator with finding speakers, organizations, and activities that align with the goals and objectives of each particular family day event. Family days focus on heritage and cultural events to better connect families of all backgrounds with the National Air and Space Museum. The intern will learn about educational activities, event coordination and logistics, and working with a team on a large project.

## Middle School Programs (Education)

The intern will work with the Education department in the development of a new middle school program, which aims to reach 50,000 middle school students through on-site programming in the first year. The intern will conduct research and develop ideas with the middle school programs team to better engage students who visit the Museum and reach students in classrooms in under-resourced schools across the country. There will be two Middle School Programs interns – one based at the Museum in DC and one based at the Udvar-Hazy Center in Virginia.

## Lecture and Public Program Planning (Education)

The intern will support staff in the Education Department who work on the Museum's lectures and public programs. The intern will support logistic planning and will provide help with developing schedules and timelines for events and secure internal logistic and volunteer support. The intern will communicate and support speakers with program details and travel, will manage tickets for reserved events and oversee the execution of the program. This intern will participate in developing plans for outreach, promotion, and social media for potential programs. The intern will learn how to develop and execute all components of logistic for promoting, learn protocol, administrative processes, Museum professionalism along with overall Museum program planning.

## Teacher Innovator Institute (Education)

The intern will work on the Teacher Innovator Institute (TII), a professional development program, at the Museum that welcomes thirty middle school STEAM teachers from across the country each year. TII strives to incorporate informal education practices and problem-based learning into the middle school STEAM curriculum by using Museum resources to model a variety of techniques, including inquiry learning, object-based learning and project-based learning. The intern will assist with the planning and execution of the 2020 Teacher Innovator Institute. The intern will organize and plan three-week institute and help facilitate sessions and trips, and will assist in communicating with the incoming teachers.

## Exhibits Internships

### Exhibits Writer/Editor

The intern will provide editorial assistance to the Exhibits Writer-Editor in the exhibition script operations at the National Air and Space Museum (NASM) as we transform our exhibitions to a new level of public engagement. The intern will assist in these areas: interpretive planning, script

development, editing and writhing, and maintaining the NASM Editorial Style Guide. The intern will review and evaluate draft label scripts, hone editing and proofreading skills, participate in exhibition development, and work alongside professionals in one of the most visited museums in the world. Specific tasks will vary depending on the exhibit design project phases.

### **Media Development for Exhibitions**

The intern will assist mentor with development and evaluation of exhibition media pieces for upcoming exhibitions, as well as working with exhibition teams to ensure the voices of key stakeholders are heard throughout the development process. This intern position will help make these media pieces relevant and engaging for our target audience – middle school students – as well as inviting and inclusive to all visitors to NASM’s Museum in Washington, DC. Mentor will provide guidance on NASM’s vision for exhibition media and accessibility standards.

### **Project Management**

The intern will work with various projects teams to facilitate timely research, cost estimates, and various other projects management tasks. The intern will learn about the proper application of PM standards, criteria, policies, regulations, principles, and theories using the Project Management Body of Knowledge (PMBok) processes to produce high-quality projects on time and within budget. The intern will gain introductory skills in Project Management, specifically the use of tools such as Microsoft Project, SharePoint, and the Microsoft Office suite to provide timely information to project delivery teams. This intern will provide on-demand research for a wide variety of needs including market research for materials and costs, standard operating procedures of comparable organizations, and general investigations for all NASM project delivery teams. Through participation in project team meetings, the intern will assist in dissemination of timely information to internal and external stakeholders.

## **Museum Management and Operations Internships**

### **Advancement and Fundraising**

The intern will assist with the Museum’s membership program, the National Air and Space Society (NASS), and the Wall of Honor, serving as the front-line contact for members, gaining introductory skills interacting with members, donors, and Museum stakeholders and gaining experience maintaining a pan-institutional development database. The intern will assist with drafting and designing proposals for major individual and corporate donors. The intern will also learn about donor relations, corporate and foundation relations, and prospect/donor research. The intern will gain experience interacting with donors, using tools to determine best practices for fundraising units, and learning from a successful fundraising unit.

### **Human Resources (Shared Driver Organizer)**

The first project for this intern is organizing the shared drive of the Human Resources Unit. This drive is shared by many and is in need of an overhaul. This will include categorization, purging irrelevant documents, archiving, creating new folders and subfolders. Human Resources has identified that the best approach to organizing the shared drive is to use the three-level approach. This structured

approach includes: function, content and topic. This structure would ensure a degree of simplicity in managing and locating documents for the Unit. The intern will maintain the organizational charts for NASM on behalf of the Human Resources Unit, organize electronic files and records, develop an understanding for Human Resources and Records Management.

## Logistics Department

The intern will assist Logistic team members with projects supporting the NASM, safety, emergency management, facilities and Revitalization/Transformation projects. Support of the NASM safety program management including the develop of training and resources, program audits, and site inspections. The intern will gain an understanding of the disciplines used to develop and maintain the Museum's safety, health, environmental, and emergency management programs. The intern will interact and collaborate with museum staff across departments and SI organizations, providing a broad perspective on NASM and SI cross departmental operations.

## Visitor Services

The intern will assist with the day-to-day management of the Visitor Services (VS) program, including customer service, scheduling, and coordinating support services. The intern will act as liaison to the Museum's Behind-the-Scenes volunteer program, restructuring how these departments utilize volunteers, reviewing record-keeping systems, and directly interfacing with volunteer managers of many departments served by these volunteers. The intern will help run a VS volunteer training, research and write proposals on ways to improve the Museum and/or VS, manage and oversee volunteers at the Welcome Center, and assist with Museum programs. The intern will also support the Health and Safety program by drafting communications such as articles, bulletins, and training resources. This internship can be based at the Museum in Washington, DC, or at the Steven F. Udvar-Hazy Center in Chantilly, Virginia, depending on the selected intern.

## Planetary Research Internships

### Runoff Production on Early Mars (Planetary Science)

The intern will use image and topographic data from orbital spacecraft to search for and map ancient Martian river channels. They will use measurements of these channels to characterize the formative hydrology and make inferences about Mars' past climate. Previous experience with Geology Information Systems is desirable. The intern will learn about satellite data as they utilize a variety of image and topographic datasets. The intern will develop knowledge in fluvial geomorphology and planetary surface processes. Depending on incoming experience, the intern will be introduced to computer programming by writing scripts in Python and R.

### Wind Features on Mars and Science Outreach (Planetary Science)

The intern will work with projects in the areas of both scientific research and public outreach. The intern will assist with a study of wind-formed ripples and megaripples on the surface of Mars using HiRISE imagery from the Mars Reconnaissance Orbiter spacecraft. The intern will document and gather data on ripple-to-megaripple transitions globally. Assist with the preparation for and implementation of an

annual family educational program related to Mars. The intern will gather, develop, and prepare materials, assist with running the program, and develop and present an educational activity with guidance from the supervisor. This internship will be particularly valuable one as it provides both research and outreach experience, allowing intern to be exposed to different career paths and gain knowledge in different fields.

## Strategic, Digital, and Visual Communications Internships

### Communications and Digital

The intern will work with the Communications office on media relations, social media, and digital content creation. Exact projects can be flexible depending on interest and background of intern. The intern will learn about working with the news media, creating targeted media lists, and developing media strategies for events and programs. The intern will learn about managing social media for a large museum and work with the social media manager to brainstorm strategies and content for the museum's platforms. The intern will learn about other functions of the Communications office, including film shoots, marketing, and writing.

### Server/Data Management for Video Production

The intern will assist an Educational Video Production Team with their new Network Area Storage (NAS) server. Our end goal will include seamless data access to all our recordings, the ability to search and index video assets, automatic remote backup, redundancy elimination, and high performance of our editing infrastructure. The intern will assist in troubleshooting, testing and evaluating possible configurations, and to manage large amounts of data. The intern will gain skills in network and server configuration and optimization, and will understand the challenges of video data retention.

### Social Media for Educational Programs

This intern will work with the Interactive Media and Outreach team to develop a marketing and social media plan for STEM in 30 program. This will include developing both a long and short term plan targeted at getting STEM in 30 in front of teachers, producing marketing and social media materials, and implementing the plans. This intern will also have input on video development that would work best to expand the reach of STEM in 30. This intern will learn to work as part of a team on the production of social media and marketing assets, and to learn ins and outs of producing social media for a large organization.

### Video Production

The interns will work with the Interactive Media and Outreach production team to produce videos for the interactive webcast, STEM in 30, as well as for the website. This will include editing of pre-taped video, filming and editing new pieces, and the production of live programming on the museum floor. The interns should be proficient with video editing (Final Cut Pro or Adobe Premier preferred) and video production including videography lighting and audio. Interns will get an opportunity to produce content that is immediately published through different channels at the National Air and Space Museum.

## Web Accessibility and Inclusive Design

The intern will work with the digital experience team to make the Museum's digital content (digital assets to include images, video and audio) more accessible to the broadest possible audience. The intern will research inclusive design practices and prepare accessible descriptions and transcriptions for images, video and audio in the Museum's databases and collections. The intern will evaluate effectiveness of accessible content to better engage audiences of all abilities. The intern will learn about inclusive design principles to prioritize online access and engagement for audiences of all abilities. This intern will learn about museum collections and data management.

## CHANTILLY, VIRGINIA

Internships at the National Air and Space Museum's Steven F. Udvar-Hazy Center in Chantilly, Virginia.

### Archives Internships

#### Archives Collections Processing

The intern will perform arrangement and description of collections at the National Air and Space Museum (NASM) Archives, including the *Jacques Tiziou Space Collection*, to promote the preservation of the collections and facilitate their retrieval in response to reference inquiries. Basic archival processing will include rehousing, refoldering, labeling, digitizing, indexing and preparing container list and/or database entries. The finding aids will be produced using standard formats of archival description, including Describing Archives: A Content Standard (DACCS) and XML standard Encoded Archival Description [EAD] for encoding the finding aids so they can be made accessible to the public via Smithsonian Online Virtual Archives (SOVA) and NASM web pages.

### Education Internships

#### Middle School Programs (Education)

The intern will work with the Education department in the development of a new middle school program, which aims to reach 50,000 middle school students through on-site programming in the first year. The intern will conduct research and develop ideas with the middle school programs team to better engage students who visit the Museum and reach students in classrooms in under-resourced schools across the country. There will be two Middle School Programs interns – one based at the Museum in DC and one based at the Udvar-Hazy Center in Virginia.

#### SHE Can STEM Camp in Virginia (DC-Area) (Education)

The interns will help in the planning and facilitation of two two-week day camp for local students to explore STEM topics. The camps, which will take place during the internship, will focus on innovation in aviation, exploring museum artifacts as well as posting design-engineering challenges and team-based

activities to campers. The interns will work as a team to create content and materials for the bulk of the experience, reviewing research of past years' interns and building upon it with new research.

## Museum Management and Operations Internships

### Visitor Services

The intern will assist with the day-to-day management of the Visitor Services (VS) program, including customer service, scheduling, and coordinating support services. The intern will act as liaison to the Museum's Behind-the-Scenes volunteer program, restructuring how these departments utilize volunteers, reviewing record-keeping systems, and directly interfacing with volunteer managers of many departments served by these volunteers. The intern will help run a VS volunteer training, research and write proposals on ways to improve the Museum and/or VS, manage and oversee volunteers at the Welcome Center, and assist with Museum programs. The intern will also support the Health and Safety program by drafting communications such as articles, bulletins, and training resources.

## Strategic, Digital, and Visual Communications Internships

### Marketing at the Udvar-Hazy Center

The intern will support the Museum's marketing and communications activities at the Steven F. Udvar-Hazy Center. The intern will obtain/expand knowledge related to destination marketing through work on advertising plans and development and implementation of a Museum program's multi-platform marketing plan. The intern will also enhance abilities in the development and/or design of print and online advertisements. The intern will learn about and assist with outreach efforts to local tourism industry organizations. The intern will also gain skills related to media relations as they pertain to a large, public museum by assisting/staffing media and documentary film/photo shoots.

## SUITLAND, MARYLAND

Internships at the National Air and Space Museum's Paul E. Garber Facility in Suitland, Maryland.

## Collections Internships

### Collections Processing

The intern will work in collaboration with staff from the Collections Processing Unit and will participate in varying stages of the ongoing move of the National Collection from the Garber Facility in Suitland, MD to the new collections storage facility at the Steven F. Udvar-Hazy Center in Chantilly, VA. The intern will learn about object handling, rehousing, cataloging, condition assessment, photography, and transport. The intern will learn about proper documentation and tracking of artifacts in the Collection Database, proper rehousing and shipping techniques for small and medium artifact.

## OTHER LOCATIONS

### Education Internships

#### **SHE Can STEM Camp in Bentonville, Arkansas (Education)**

The interns will help in the planning and facilitation of a two-week day camp for middle school students in Bentonville, Arkansas, to explore STEM topics. The camps will focus on innovation in aviation, exploring museum artifacts as well as posting design-engineering challenges and team-based activities to campers. The interns will work as a team to design content for the camp and supervise campers in daily operation of camp. Note: this internship is only five weeks (June 15 to July 18).