

# **NASA International Internship Program**

## **Mid-internship Report**

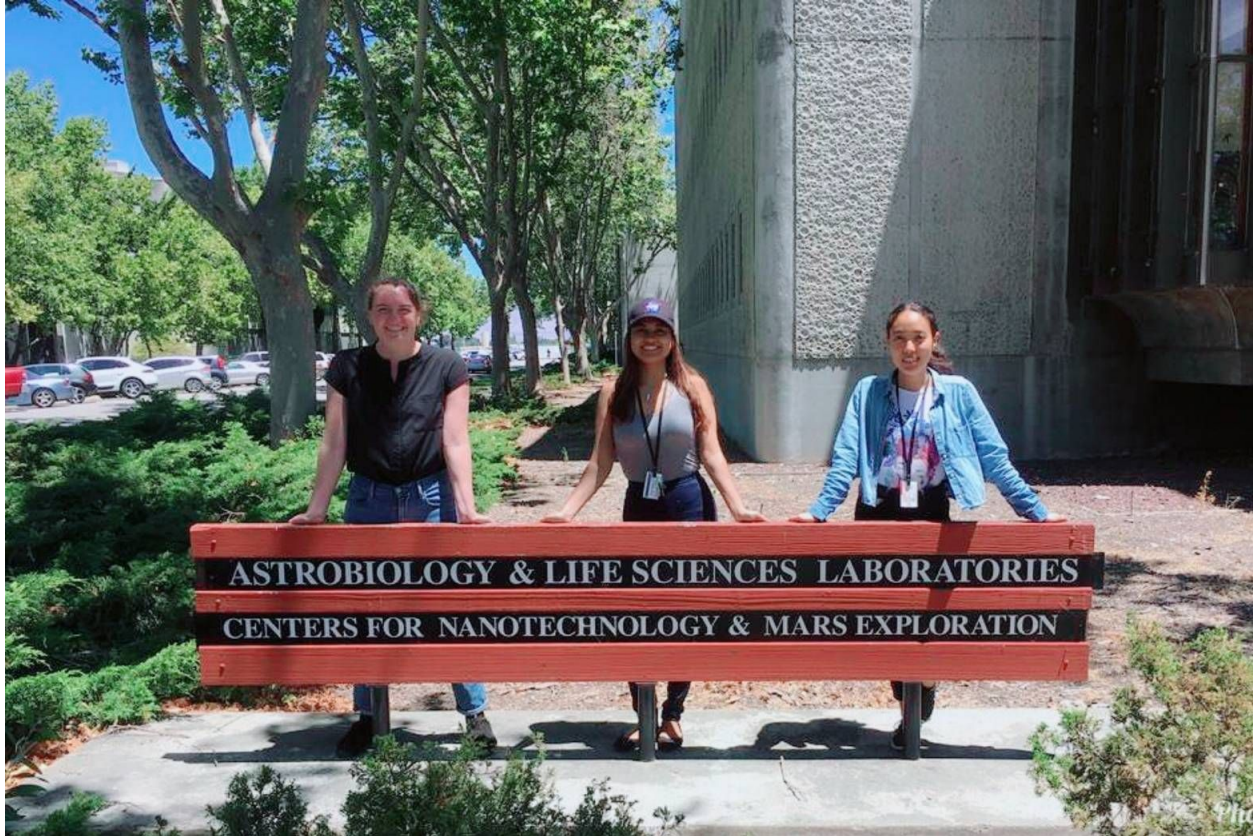
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As a child, I read about the National Aeronautics and Space Administration (NASA) in every single space book at my school's library. So I continually fantasized about the innovative thinking, advanced technology, scientific discoveries and development that happens at NASA... "How amazing it would be if I can only, just, get to go visit there someday?!", the fascinated seven year old me pondered with the widest eyes filled with the biggest admiration ever for the people who all contribute to the greatness, progress and success of NASA. That little me, only in her wildest dreams envisaged that I could be there one day as one of those amazing people who are contributing to NASA's most important missions at building N-239, the Center for Nanotechnology, as an intern under the supervision of my very brilliant and kind Korean mentor.

Each mission is designed to assist the goals of NASA in some unique way. Since ultra-violet (UV) radiation is the leading cause of skin cancer, it becomes very important to monitor UV radiation exposure when astronauts are exploring on planets which lack an atmosphere to protect them from this harmful type of radiation. Therefore, I am working under the NASA In-Space Manufacturing (ISM) project which aims to provide on-demand manufacturing of sensors and devices to aid astronauts during exploration missions. 3D printing technology allows for the fabrication of electronic components at any time, at any location. In this way, we are working to develop fully 3D printable, flexible, ZnO UV sensors to be worn on wristbands or sunglasses by astronauts for this purpose. This 3D printing technique has potential for use in production at the point-of-demand on the International Space Station (ISS) and on other planets where the logistics is complex and expensive.

Coming to NASA is by no means a small victory. It is a major stepping stone at this critical point in my life when career choices are crucial for my future. I have met so many amazing, inspiring individuals ranging from students my age to very mature and wise NASA scientists who continue to encourage me to pursue higher academic goals and scholarships to future my career in science and technology. I am very blessed and lucky to be part of this internship program at NASA Ames Research Center in Silicon Valley, CA, USA. I am proud to be representing my people of Trinidad and Tobago and I sincerely thank those who have supported me in getting here to have such a special opportunity to make connections with others from many different countries such as India, Portugal, England, New Zealand, China and Korea among many others.



NASA Building N-239

I feel very proud to be standing with my colleagues (middle)  
whom I share my days with at NASA.

You never know what you are capable of! You might just surprise yourself.

*"A ship is always safe at shore but that is not what it's built for."*

*-Albert Einstein*