YiWen Deng ENG ‘18
Mechanical Engineering with a concentration in manufacturing
My goal for the future is to help develop efficient techniques to build the next generation aircrafts for Boeing. This summer, my manufacturing module “Lego Assembly” aims to teach high school students about the assembly line. My hope is that they will recognize how many products are made using this technique and why it is more efficient.

Brandon Sookraj ENG ‘19
Mechanical Engineering with Astronomy Minor
Looking ahead, I plan to earn a master’s degree in Aerospace Engineering in order to work for a space-faring company such as NASA or SpaceX. Until then, I want to refine my engineering skills by getting practice in industry and research labs. This summer, I have designed two educational modules, Fun in the Sun and Math Machine. Fun in the Sun is a project where I teach students about solar energy by showing them how to create homemade solar cells; partially based off of the research being done by Dr. Sharifzadeh and her lab. Math Machine is a project where I teach students about compound events by relating the topic to the real life scenario of determining how likely a machine is to fail.

Soniya Patel ENG ‘18
Mechanical Engineering with a concentration in manufacturing.
I joined TISP because I want to inspire students younger than me to want to pursue STEM fields. This summer I worked on a project inspired by Dr. Holt’s research on wave focusing. My innovation in a box called “Wave Energy” will teach students the basics of waves through a design challenge based on wave energy generators. After graduation, I hope to work in industry and continue my passion for product design and development.

Arley Trujillo ENG ‘18
Computer Engineering
I joined TISP was because I'm passionate about impacting students and connecting them with opportunities they might not have access to due to their financial situation or environment. Last summer I was able to develop and teach my own curriculum in a classroom using UAVs and coding. This summer I worked as a project manager and curriculum developer for the new innovators as they created their workshops.

Benjamin Newbery ENG ‘18
Mechanical Engineering
I first got involved in engineering because of my love for math and science and my interest in teaching. My high school guidance counselor told me that with engineering, I could create and innovate, but also teach people of different backgrounds about the wonders of engineering. TISP is a great way to fulfill all these goals, while giving back to the community. This summer, I am working to find a simple and informative way to teach students about important concepts of modern physics. For younger students, modern physics can be intimidating, so I think introducing it in a way that is easy to understand is very valuable. As I move forward into my last year of school, I hope that I can keep inspiring and teaching students any way that I can.

Esther Huynh ENG ‘19
Mechanical Engineering
This summer I developed an educational module inspired by Synthetic Biology and helped create a basic training manual for FIRST Robotics mentors. My interests include exploring the application of technology to streamline medical care, the intersection of design and technology, and robots. I strongly believe that many societal issues can be solved through innovation and the advancement of technology.
Michael Ward ENG ‘17
Mechanical Engineering

This summer I have started a one year Masters in teaching program at BU as part of their STEEP program. I started working for TISP for 3 years and have had the opportunity to create and teach lessons including our math and business version of the Marshmallow Challenge, and a NASA sponsored lesson about the James Webb Telescope. As part of the Marshmallow Challenge I created, I was included in a published piece that was accepted by the American Society for Engineering Education in 2015 that highlighted the math standards and rigor involved in the activity. This year I have taken on a leadership role as the Organizational and Development lead in helping to drive BU's Outreach and Diversity forward and create a student leadership platform. This work has included creating workshops to train undergrads to go into the classroom and lead middle and high school students through our Innovations in a Box. I have also helped to coordinate and run, UDesign, a STEM middle school summer camp that we offer in July.