



# MONKEY BUSINESS

News of the Funky Monkeys, Lynbrook High School Robotics, FIRST® Team 846



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## Table of Contents

- 1 Presidents' Welcomes • KLA Demo • Internship
- 2 Mr. Xie Retires • The Move • Upcoming Events

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## An Internship Experience

Using skills I learned in Robotics to Excel as an Intern

Kunal Patel (Sr.)

Over the summer, I was able to intern at a company called Leiden Measurement Technology. Leiden Measurement Technology is a



Kunal Patel (sr.) assembling the collector of our 2019 robot  
*see **Internship**, Page 2*

## Presidents' Welcomes

Anna Shaposhnik (Sr.)

As a freshman, it's important to explore! There are so many different opportunities in highschool and only four years to invest yourself in something you enjoy. For me I started out juggling many things: debate, mock trial, drama... but I finally found myself coming back to robotics, surrounded by passionate people with differing interests all working to improve this program and our robot. I take everything I enjoy about those other activities and apply them here: defending my designs, presenting to sponsors, attending huge international competitions, just having fun singing and dancing. As a Funky Monkey, it feels very rewarding to see the results of our teamwork each year.

To succeed you have to be proactive and stand up for your ideas, but you can

*see **Anna's Welcome**, Page 2*

Kunal Sheth (sr.)

Want to make 120 pounds of aluminum come to life? Interested in developing a business plan, team brand, or applying for your first grant?

At Lynbrook Robotics, we bring people who love robots together. Whether you want to get your hands dirty with some metal machining, write software to make robots go, or create art and animations to communicate what we do on the team, robotics has a plethora of ways to get involved.

If you're not sure where to start, or don't have any prior experience building robots, do not worry! There is a place for everyone at Lynbrook Robotics. Come to our fall workshops and we'll show you the ropes. Each workshop will get you up to speed on the basics of one aspect of robotics—programming, electronics, mechanics, and machining to name a few. Attending workshops as a freshman not only helped me to further explore my interest in pro-



*see **Kunal's Welcome**, Page 2*

## KLA Demo

Worst Fear becomes Greatest Asset

Anna Shaposhnik (Sr.)

A round of applause then "Next!" It's our turn to present in front of a room full of robotics teams and KLA representatives. We hadn't practiced a lot beforehand but we had a plan, and all at once it seemed to lay in ruins. The slide presentation we sent didn't open!

Let's rewind a bit. KLA is one of our sponsors. The company is in charge of creating quality assurance machines for semiconductors. Within 10 nanometers (smaller than the wavelength of light!) their machines are able to

scan a large semiconductor plate to detect defects. We and 8 other teams were invited to the company event "RoboGames" to show off our robots and compete in front of KLA's employees, raising awareness for our great program. Before the event itself we were given a 5 minute



The team touring the KLA labs

### Anna's Welcome, Continued...

do that while creating 3D animations, designing robot panel artwork, shooting photography or coming up with your own moonshot projects. I picked up many interdisciplinary skills that shape the future of what I want to do as a designer.

Your possibilities are endless, and should you choose to embark on your own robotics adventure, I'm extremely excited for where you will take our team next!

### Kunal's Welcome, Continued...

gramming, but also broadened my horizons to electronics and machining too. Whether or not you know what you want to do, remember not to restrict yourself to just one area. Just jump in and learn something new!

The past three years on this team have been extremely rewarding for me. Robotics even helped land me my first job, a software development internship at Cisco. I'm glad I decided to join the team when I was a freshman. I hope you too will find your place on this team, and I look forward to seeing you around!

slot for a presentation about our team. And here we were, seemingly quite in trouble.

I take a deep breath. "It's okay, we can do it without slides" I smile. The KLA representatives look around and shrug. Really? Really. You see, slides are never meant to be the core of a presentation. We are. And while the other teams ranted on about the specifics of their robots, slouching in the corner, or face away from the audience, without our slides, the spotlight was on us and on our trump card: our stories.

To my surprise it was much easier to focus on what I was saying without slides. What's more, the whole audience had nowhere else to look but at us. And so, we each described how robotics influenced us, and by the time we finally finished everyone was surprised and touched by our performance.

From this experience I took away the importance of focusing a presentation and making it personal. For our sponsors, we presented as examples of the success of the robotics program. And for the students we summarized how our team is unique in its organization and professionalism.

research and development company that specializes in developing high-end scientific instruments using microfluidic, optical, spectroscopic, and chemical extraction techniques. These devices have been used in a variety of different applications, such as water analysis, environmental analysis, biomedical analysis, and space exploration. One of the more recent devices they created was a special spectrometer that could detect trace organics in water. Leiden hopes that this spectrometer can be used on space exploration missions to places such as Europa or Mars, to help analyze these environments in an attempt to look for evidence of life in these places. As an intern I designed various parts using CAD, and then 3D-printed them. This is where my experience with robotics really helped out. Additionally, as this was a start up, I would help with administrative work, as well as help them out with the organization of their lab space. Overall, I enjoyed my internship with Leiden Measurement technology because I learned quite a bit and gained valuable work experience.

## Mr. Xie's Retirement

Mr. Xie

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Our presidetns presenting Mr. Xie with a team photo

## Moving

### Cleaning Up Over the Summer

Swasti Jain (soph.)

This past summer was spent hauling heavy shelves of metal beams, as we were forced to move out of our storage room, room 607. In order to plan ahead, I created a model using CAD so that I could figure out the optimal way to arrange the room. I was personally shocked by the difference in size of the alternative space, roughly three-fourths of the original storage room space. Due to the limited space, we had to dismantle robots from past years, which are fundamental when teaching new members about how a robot works, and inspiring designs during build season. Everything that couldn't fit into the small storage unit was crammed into the already packed machining room. Physical obstacles and overall less space introduce an unnecessary safety hazard. This move has been difficult but thanks to the efforts of our team the transition was seamless.

## Upcoming Events

|  |   |   |   |
|--|---|---|---|
| <b>Sep 28-29</b><br>Chezy Champs<br>Bellarmine College Prep. | <b>Oct 1</b><br>Parent Meeting<br>7:30 pm<br>Auditorium | <b>Oct 4-5</b><br>CalGames<br>Woodside HighSchool | <b>Oct 5</b><br>Open House<br>Intuitive Surgical Headquarters |
| <b>Oct 7-11</b><br>Workshops Start<br>Afterschool Rm. 608    | <b>Oct 16</b><br>FUHS<br>Call-A-Thon                    | <b>Dec</b><br>Winter Social<br>TBD                | <b>Jan 4</b><br>Kickoff<br>Build Season Begins!               |

### Workshops

Mon - Machining  
Tue - Design  
Wed - Animation  
Thu - Electrical  
Fri - Software - Media

### Weekly Meetings

**Team Meetings**  
every Tuesday  
7-9pm @Room 608  
**Lunch Meetings**  
every Wednesday  
@Room 608