



MONKEY BUSINESS

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



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Editor-in-Chief: Arnav Kamatala

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- Co-President.....Shovan Jagadev
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Presidents' Welcomes



Shovan Jagadev (sr.)

Halfway into sophomore year, I found myself dragged into the 2022 FRC season kick-off by a friend. Up until that point, I had never set foot in a robotics meeting and was convinced it would be my
see Shovan's Welcome, page 4

Celine Li (sr.)

Welcome to a new year! Stepping into the robotics room with nothing to do in my sophomore year, I never would have imagined the change it would bring to my high school career, and potentially bey-
see Celine's Welcome, page 2

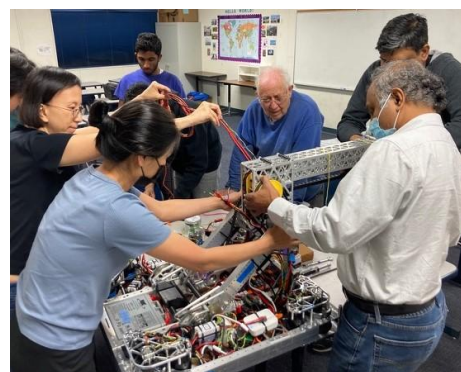
The Vital Role of Mentors

Arnav Kamatala (soph.)

In the First Robotics Competition (FRC), the driving force behind a team's success is not just advanced machinery or the size and quality of the facilities; it is the guidance of the mentors that allows students to perform at their best ability and have the

greatest impact on a team. At Team 846, we value our mentors' contributions, especially our parent mentors.

Baskar Odayarkoil, an interested parent, has always aimed to mentor an FRC team. Joining in January of 2023, he was extremely enthusiastic about helping our team. Passionate parents like him are instrumental in assisting students in the design process, machining, and much more when they have the technical skills to do so.



Parent mentors-in-training.
see The Vital Role of Mentors, page 3

Dance and Robotics

Sanjana Kamath (jr.)

Participating in robotics has unexpectedly played a vital role in my path to completing my Arangetram in bharatanatyam, a journey marked by years of intense training and dedication to this classical dance form. An Arangetram is a significant milestone in the world of Indian classical dance, particularly in bharatanatyam. It is a solo performance of eight dances that marks the completion of rigorous training and signifies a dancer's readiness to perform publicly. During an Arangetram, the dancer showcases their mastery of complex dance movements, expressive storytelling, and musical coordination in front of an audience of fam-

Robotics improved my work ethic, making me more precise and disciplined.

ily, friends, and other dancers. Achieving my Arangetram this summer was a monumental milestone, representing over a decade of commitment to dance. Despite the apparent differences between dance and robotics, my experiences in STEAM have contributed to my success on this remarkable journey.

In robotics, I've developed a deep appreciation for dedication, teamwork, and innovation. Attending robotics work sessions and collaborating on complex projects have taught me the value of persistence. It improved my work ethic, making me more precise and disciplined. While designing and experimenting may seem a world apart from dance, these experiences have honed my problem-solving skills and instilled the importance of meeting deadlines with commitment. Robot-

see Dance and Robotics, page 4

Celine's Welcome, Continued...



Celine Li (sr.) working on the 2023 robot.

ond. I was amazed at the cluster of yellow robots in one corner of our workspace, each unique mechanism representing a proud history of their own FRC game. As I learned about the design histories behind each, I aspired to contribute to this corner's innovation.

Watching our designs come to life, from CAD to a vibrant yellow robot, filled me with joy and confirmed my desire to continue creating. As competition season arrived, the sight of our robot shining on the field amid cheers and applause gave me an unparalleled adrenaline rush.

In addition to my attraction for design, I soon found myself irresistibly drawn to the non-technical aspects of our team. From delving into business strategies to exploring the realms of art and video editing, this team is a wonderful place to fulfill all your curiosity. Through days of putting together our yearly photojournal (yearbook), I realized my potential as a scrapbook artist.

Collaborating with peers on the business plan provided valuable insights into the intricacies of team logistics. And in the process of conducting numerous demos and delivering public speeches, I witnessed a profound transformation in everyone's self-confidence and mannerisms. The non-technical facets of our team proved to be just as vital as the technical ones.

Robotics is not just about robots. It's about the process of building the robot: the journey of personal growth, teamwork, and a world of opportunities waiting to be explored. 🤖



Sanjana Kamath (jr.) performing her Arangetram.

Karan's Summer at Noah Medical

Karan Annam (sr.)

I was nervous walking into Noah Medical as it was my first day working at a professional company. Did I know enough? I wondered if, as a high-schooler, I could contribute meaningfully among experienced adults. These were questions running through my mind as I sat down at my desk staring at the bootup screen of my work laptop. In my first meeting, I was assigned a task: design tooling for a battery-powered crimper to allow us to crimp wires for a capstan drive. Despite being a relatively straight-forward design task, I was unfamiliar with the company's use of SolidWorks. But as I sat down

and opened SolidWorks, I noticed it was shockingly similar to Inventor, realizing that it was no different from what I've done in robotics.

It wasn't just the technical skills taught by robotics that came in handy but also the communication skills.

I had gone through the process of prototyping countless times before and drawing on my robotics experience, I swiftly created a 3D model and sent it off to the 3D printer to test the fit with the crimper. As I excitedly rushed to the printer to grab my print, I was eager to finally test it out. Unfortunately it was too good to be true; the fit needed to be fixed.

In robotics, I learned the importance of not just coming up with a design but also iterating and improving it. Noting all my mistakes on my first attempt, I rushed back to my laptop to make changes, quickly iterate my design, and send it off to print again. This time, as I tested the part, it was successful!

It wasn't just the technical skills taught by robotics that came in handy but also communication skills. Like in robotics subsystem groups, I joined a four-person mechanical team, emphasizing the importance of effective communication. My experiences in robotics endowed me with the skills required to succeed in a professional setting.



The Vital Role of Mentors, Continued...

This offseason, some of our students' parents, like Baskar, were given the fantastic opportunity to build their own FRC robot, a project that aimed not only to improve their skills but also to deepen their understanding of the process students go through when designing a robot. While we have continuously struggled with a lack of technical mentors on the team, giving parents a hands-on opportunity to build a robot addressed this issue by turning our committed team of parents into more technical mentors for team sustainability. Under Mr. G's and others' guidance, many mentors learned new technical skills and took their first step in previously uncharted territory. Baskar learned how to machine and developed his skills in Inventor CAD and CAM. His hands-on involvement this summer was instrumental in fabricating the drivetrain, the heart and soul of our robot. Each mentor took charge of a spe-

cific subsystem, fostering an environment where skills were honed and knowledge nurtured.



Our dedicated team of mentors and the 2910 summer robot.

One of the most exciting parts of building a robot is seeing it come together, which is the case with our parent mentors. Throughout the summer, the students helped diligently, witnessing the robot gradually take shape under the mentors' leadership. The parents' dedication, combined with the students' enthusiasm,

showcased the incredible power of collaboration and the fulfillment of seeing a 3D-modeled robot through the 15-inch screen of a laptop evolve into a hundred-pound robot made of metal.


Our new idea to develop our interested parents into active mentors to the students was an overwhelming success, and teams all around lauded us for the novel solution. This project had a great reception at the Capital City Classic, both from other teams and judges as they appreciated the creativity of finding an engineering solution to a significant and prominent problem of the FIRST community. As the robot took shape, it became a prime example of how parents and students working together can make a difference. By bridging the gap between the parent's interests and actively mentoring the team, we've not only tackled a serious issue but shown the FIRST community a practical solution.



Dance and Robotics, Continued...

ics has nurtured in me an ability to adapt to new challenges and a genuine passion for exploring exciting solutions. During the last build season, managing practice times for dance and robotics became a challenge. However, I soon learned the importance of effective time management, significantly improving the situation. One memorable event occurred when I attended a robotics work session, left for dance practice, and returned to robotics, all in the span of five hours. Despite the hassle, I loved the rush and the sense of involvement in two different worlds.

Both these experiences are a significant highlight of my life, as both robotics and dance offer unique perspectives. What’s incredibly fascinating is how this perspective has influenced my journey in bharatanatyam. It allowed me to embrace innovative choreography and integrate technology to enhance the visual and emotional impact of my Arangetram performance.

Robotics has transformed my Arangetram journey into an extraordinary fusion of art and technology, illustrating how two seemingly unrelated activities can beautifully complement each other. 

Shovan’s Welcome, Continued...



Shovan Jagadev (sr.) at the Los Angeles Regional 2023.

last. However, life had a different plan because I found myself quickly obsessed with robotics. What initially piqued my interest in The Funky Monkeys was not the robots—I had no interest in engineering at the time—it was the people who truly captured my attention.

To this day, my favorite aspect of robotics is still the people.

In the first few days, I crossed paths with some of the most remarkably brilliant individuals, people whom I’d never have met without robotics. I was in awe of their ability to effortlessly conceive and explain elaborate designs. However, these people were also highly dedicated to ensuring everyone’s ideas were valued, no matter how unconventional they may have been.


That first work session left a last-

ing impression and passion for the team. To this day, my favorite aspect of robotics is still the people. Meeting students from different grades, different schools, and even students’ parents. These are all people that I’ve gotten a chance to know and befriend because of a shared interest and passion for robotics. Over time, my interest and skill in the engineering side of robotics grew, but I think of that as a natural byproduct of working with various people in FRC and adopting their passions. These interactions nurtured my interest in mechanical design and my desire to learn as much as possible about robots.

Robotics extends beyond just operating machinery or using CAD. It’s about growing within a supportive community and helping that community develop with you. Robotics is complex and difficult: with a steep learning curve, the supportive nature of

The supportive nature of the team plays a pivotal role in your growth on the team.

the team plays a pivotal role in your growth on the team. Being able to lean on fellow team members who have or are facing the same challenges is an invaluable skill because that’s what makes being on this team a truly fun experience.

Whether your goals are to improve your programming skills, delve into CAD, or pursue video production, there’s a place for you in robotics, surrounded by teammates with similar interests and people who will do their best to help you grow as an engineer and a person. 

Fall Workshops

Monday 4:00 Media

Tuesday 4:00 Design

Wednesday 3:15 Software

Thursday 4:00 Machining

Friday 3:15 Electrical

Graphic by Phoebe Tang