

SPRING 2020



A LEGACY OF EXCELLENCE, A FUTURE FOR MANUFACTURING'S BRIGHTEST MINDS



A Note From the Foundation Director

Nuts, Bolts & Thingamajigs® (NBT) has made great strides with the summer manufacturing camp program in recent years. This year, over 180 NBT summer manufacturing camps will take place across the U.S., a 48% increase over last year. During the camps, an estimated 3,800 students will learn new skills, make take-home projects with their hands, and share their creations with their families. We

believe moments like these will serve as the catalyst for a new generation of young adults to find a future career within the manufacturing sector.

In this issue of the newsletter (in the photo above and the story below), you'll meet a successful student, Amanda, who discusses her eye-opening experience at an NBT summer camp and how it helped shape her future career path in biomedical engineering at Harvard University. The summer camp program is not possible without the donations and support from our contributors. We are grateful for every dollar, as it is an investment in the next generation of skilled manufacturers.

Thank you for your generosity,
Edward C. Dernul

“In the last decade, the manufacturing camp program has grown from 16 camps in 2010 to more than 10 times that number this year – the growth has been an amazing accomplishment.”

MEET AMANDA DYNAK

Amanda attended her first summer manufacturing camp in 2014 at Triton College in River Grove, Illinois. The camp, which was an hour drive from her home, was named GADgET (Girls Adventuring in Design, Engineering, and Technology), a two-week long, all-girls camp for ages 12-16.

“My most powerful experience in manufacturing and engineering was with a group of 12-year-old girls It was here that as a young student, I learned to use hand tools, drill presses, 3D printers, and my imagination to turn raw, recyclable materials into useful and functioning contraptions. This program sparked my passion for engineering. GADgET was so formative and enlightening that I was shocked that [a camp like this] didn't exist in my own town.

When I started freshman year [at Ridgewood High School in Norridge, Illinois], I approached my school's Board of Education to gain approval for a second iteration of GADgET to be offered in my hometown on our campus so that local middle-school girls didn't have to go far to gain hands-on engineering experience. I was successful, and for the past

few years now, I have served as a leader and mentor for both programs.”

Amanda will attend Harvard University in the fall to study biomedical engineering. On her application to Harvard, she credited her technical and leadership skills to experiences she gained at the GADgET camps she attended and served as a mentor. She plans to continue her medical research and exploration in engineering and manufacturing methods of all kinds.

NBT congratulates Amanda on her determination and perseverance to reach her goals and share her knowledge of science, technology, engineering, and mathematics (STEM) education.



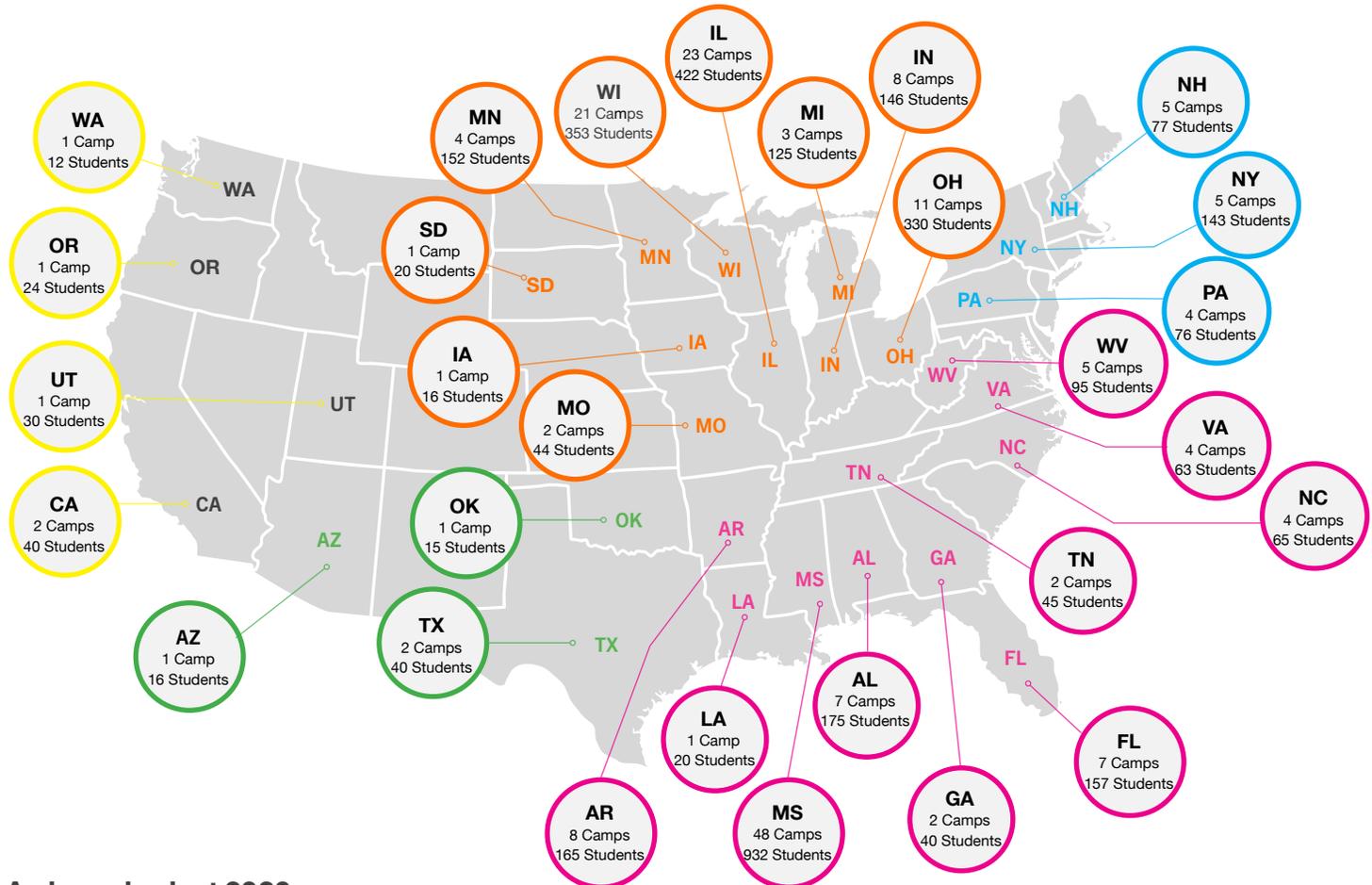
NBT MAKES A BIGGER IMPACT IN 2020 THROUGH CAMPS

The labor shortage concern is growing among business owners and corporations across the nation. The fear is that not enough skilled workers will apply for open positions and will thereby affect the pace of production. The challenges of keeping labor costs economical and overall costs competitive, nationally and globally, are top of mind for manufacturing

employers. What can be done? How do we overcome this hurdle that can severely impact the future of the U.S. manufacturing industry?

Every year, NBT encourages students to consider manufacturing career paths through youth-based summer camps. This year over 180 camps will take place across the U.S. where

they will learn basic manufacturing skills in a fun, positive, and creative environment. Students are exposed to a wide variety of technical skills and are taught how to plan, design, weld, bend, machine, build, and assemble projects with their own hands. Oftentimes, camps help students find their way to new careers simply by making a connection to these activities.



A closer look at 2020 summer camps:

3,838
ESTIMATED STUDENTS

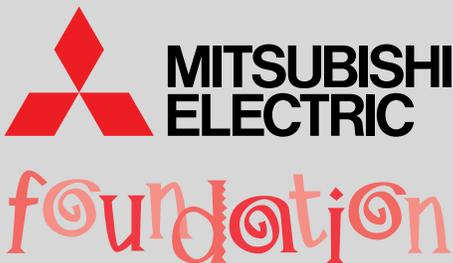
185
SUMMER CAMPS

29
STATES

16
ALL-GIRLS CAMPS

94
FIRST-YEAR CAMPS

For a complete list, visit nbtfoundation.org/camps.



MEAF GRANT SUPPORTS THE LAUNCH OF INCLUSIVE MANUFACTURING CAMPS

NBT is excited to announce they have been awarded a grant from the Mitsubishi Electric America Foundation (MEAF) to fund the establishment of Inclusive Manufacturing Camps for young people with disabilities. Working in collaboration with partners from education, industry, and social services, the three-year MEAF grant will provide NBT with the resources needed to develop a customized camp curriculum that introduces manufacturing career pathway opportunities to this underserved population.

Initial planning and camp development will take place throughout this year, with one pilot camp program running in 2021 and three inclusive camps in 2022. With the right training in an inclusive environment, many young people with disabilities can enter and succeed in the manufacturing workforce.

Watch for updates on nbtfoundation.org for more information about this exciting new program.

Manufacturing Students Start 2020 With Scholarships



“It is an honor to have been selected as one of the candidates for the NBT scholarship. The money has helped to lower my student loan. While the fall 2019 semester was challenging for me, I am very excited and looking forward to my spring courses, which include CNC Applications, Robotic Applications, and Introduction to Metallurgy. Please know that I am committed to doing well in my studies and I really appreciate the scholarship that you have established.”

John Provenza, Jr., Marysville, Pa.
Automated Manufacturing Technology
Pennsylvania College of Technology

Congratulations to the following students who were awarded NBT scholarships for their spring semester. These bright-minded, career-focused individuals are taking the next steps to join the skilled labor workforce.

Tyler Bandle

Slatington, Pa., studying **automated manufacturing** at Pennsylvania College of Technology

Sean Bush

Williamsport, Pa., studying **mechatronics technology** at Pennsylvania College of Technology

Jacob Chastain

Green Bay, Wis., studying **manufacturing engineering technology** at Northeast Wisconsin Technical College

Kyle Dierking

New Albany, Ind., studying **mechanical engineering** at Indiana University – Purdue University Indianapolis

Cinnamon Digan

Mifflinburg, Pa., studying **welding engineering and fabrication** at Pennsylvania College of Technology

Luis Garcia

Berwyn, Ill., studying **electrical and electronic system technology** at Lincoln College of Technology

Taylor Nett

Fond du Lac, Wis., studying **welding** at Moraine Park Technical College

Drew Nordman

Victor, Mont., studying **instrument and control technology** at Bismarck State College

Nicole Pomeroy**

Michigan City, Ind., studying **mechanical engineering** at Valparaiso University

John Provenza, Jr.

Marysville, Pa., studying **automated manufacturing technology** at Pennsylvania College of Technology

Abigail VanDuyn

Orion, Ill., studying **mechanical engineering** at Iowa State University

Jacob VanWormer

Baraboo, Wis., studying **metal fabrication** at Madison Area Technical College

Trey Vela*

Huntsville, Texas, studying **mechanical engineering** at Texas Tech University

Niles Walter**

Chiloquin, Ore., studying **advanced manufacturing engineering technology** at Klamath Community College

*U.K. Gupta Family Endowed Scholarship Recipient

**John Grossheim Memorial (OPC) Scholarship Recipient

Since 1990, NBT has awarded more than \$1 million in scholarships to over 500 students that will become the next generation of manufacturing professionals. **Fall 2020 applications are being accepted through March 31.** For more information on how to apply and who is eligible, visit nbtfoundation.org/scholarships.

Priority consideration is given to FMA members, employees of member companies and their dependents, and students attending Certified Education Center (CEC) member schools.



COMMON GOALS RAISE AWARENESS FOR MANUFACTURING EDUCATION

October 2019 marked the fifth consecutive year that the 5K Run or Walk for Education was held in Safety Harbor, Florida. Mastercut Tool Corp and The Shaluly Foundation LLC sponsored the event to celebrate



Manufacturing Day and bring awareness and support for the future of the industry. Proceeds of the race were awarded to NBT, along with four other organizations that support manufacturing education. Race proceeds have reached \$124,205 over the last five years.

Michael Shaluly, owner of Mastercut, presented a generous donation check of \$6,228 to Ed Dernulc, NBT director, last month. The contribution is directed to NBT's manufacturing camps to be held in 2021. **Thank you to Michael and Mia Shaluly of the Shaluly Foundation LLC for your charitable donation!**

WORK HARD, PLAY HARDER FOR MANUFACTURING IN CHARLOTTE MONDAY, APRIL 27

Join NBT at a new fundraiser, GOLF4MFG® South, in the land of sweet tea, barbecue, and golf! Experience a full day of golf, competition, and camaraderie in Charlotte, North Carolina, when you hit the southern links at Ballantyne Country Club. Put your game to the test on the legendary Rees Jones designed course that offers challenging play to golfers at all skill levels.

Sign up now, registration is open! Secure a foursome spot and bring your friends, coworkers, and colleagues, or sign up for individual play and we'll pair you up. Either way, you'll be supporting the NBT camp and scholarship programs to encourage the next generation of skilled employees.



The \$250 player registration includes a round of golf with a cart, driving range balls, chipping and putting greens, boxed lunch, on-course games and skills contests, post-play reception, buffet dinner, and much more!

Grab your clubs and start the season off right!

Sponsorships are available — contact Daunel Czarnecki for information, [815-227-8222](tel:815-227-8222). [Learn more | Register | nbtfoundation.org/golf-south](https://nbtfoundation.org/golf-south)

Sponsored by:



SAVE THE DATE FOR THESE UPCOMING NBT EVENTS



GOLF4MFG
Monday, August 10, 2020
Arrowhead Golf Club
26W151 Butterfield Road
Wheaton, IL 60189



Presented by:



NBT Awards Gala
Thursday, October 22, 2020
Manzo's Banquets
1571 S Elmhurst Rd
Des Plaines, IL 60018