‘Lego Masters’ star and Dallas software engineer Amie Dansby aims to smash STEM stereotypes

Her message to kids: Tech is cool; now go create something.



Amie Dansby, a tech trailblazer who has gained a following on TV and social media and advocates for girls in STEM education, has an interactive Lego wall inside her home.(Juan Figueroa / Staff Photographer)

By Helen Bond

1:00 PM on Jun 5, 2020

Amie Dansby is a self-described “maker of things” with an unabashed Lego crush who also loves 3-D printing and dressing in costumes.

To the Dallas software engineer’s numerous talents, you can add tech trailblazer. The 35-year-old Dansby was the first female intern at Marvel Studios, where she worked on the video games *Captain America: Super Soldier, X-Men: Destiny, Thor: God of Thunder and Marvel Super Hero Squad*. From there, she transitioned into research and development for PlayStation and Xbox.

Fresh off a stint on Fox’s hit TV competition series *Lego Masters*, Dansby is using her surging platform as a passionate technologist to smash stereotypes and encourage young women to build their dreams through STEM education.

Online and through worldwide conferences and workshops, Dansby teaches people of all ages to think differently about technology by “using things for their unintended purposes,” which always involves fun — and usually electronic soldering.

Amie Dansby (left) and Krystle Starr appear in Fox’s hit TV competition series “Lego Masters” as Team Unicorn. (Ray Mickshaw / Fox)

Lego has always been a therapeutic way for Dansby to relax, solve problems and have fun. As she was homeschooled alongside four brothers, the interlocking plastic bricks were used to explain engineering, science and history, as well as for play.

“I’m definitely a collector,” Dansby says. “I have an entire interactive wall of floor-to-ceiling base plates that I’ve hooked up to electronics with conductive paint. My house is my workshop.”

Beating stereotypes

No one ever told Dansby, who earned her degree in game programming and simulation, that her fandom for games “wasn’t cool,” she says. Yet, growing

up, she created code for graphics under a man’s name and never wore makeup to her mostly male college programming classes as a way to feel more respected for her work.

These days, Dansby, known for her 3-D printed brick dress designs and wearable tech costume pieces and props, wants to change that narrative. Three years ago, she created a college scholarship for women in STEM fields through the Frisco-based National Videogame Museum. (Learn more at nvmusa.org/nvm-scholarship.)

“It is almost like you feel you live this double life: ‘Why can’t I like makeup and also purses?’ It is a strange thing to feel that you kind of have to become yourself. … It took me a while to get there, and it’s why I started the scholarship,” Dansby says. “I realized, ‘Why am I trying to be anyone else? There is no one else I should be trying to be, but me.’”

Loving Lego

Last fall, Dansby engineered a way to implant her Tesla keycard microchip in her forearm to unlock and start her car with a wave of her arm. The viral video and her Twitter profile in Lego armor caught the eye of Fox producers set to launch *Lego Masters*, based on the British brick-building reality-competition series of the same name.

They convinced Dansby, who enlisted video game designer Krystle Starr, to try out for the family-friendly reality show that showcases teams of Lego enthusiasts in wildly ambitious themed brick-building challenges.

Krystle Starr (left) and Amie Dansby became friends through their mutual affection for Legos and the character costume-play artform of cosplay.(Ray Mickshaw / Fox)

Both Dansby and Starr, a.k.a. “Team Unicorn,” wanted to appear authentic to viewers, and the show didn’t let them down, says Dansby, who became friends with Starr through their mutual affection for Legos and the character costume-play artform of cosplay.

“We didn’t want to be edited or filmed down as this dumb, ditzy girl group,” Dansby says. “I have a master’s in engineering and feel like I have had to work my butt off to even be mildly respected in the tech industry. I didn’t want to go into something that I love — Lego — and misrepresent what it could be.”

Team Unicorn didn’t capture the *Lego Master* crown, but the colorful brick-building duo felt the love from their biggest fans after they were eliminated.

“Thank you … for inspiring a little girl to dream, engineer and create,” tweeted a grateful parent, among the flurry of messages, videos and kids’ drawings that were digitally shared.

A winning message

Dansby never imagined the show’s impact and still marvels at the response Team Unicorn receives from its youngest devotees. At a Lego fan convention earlier this year, little girls and boys dressed as fairies and dinosaurs patiently waited in a two-hour line to meet Dansby and Starr.

“It has been a very humbling experience,” Dansby says.

Amie Dansby wears a Lego cat ears hairband and a belt she made herself. The Dallas area software engineer was the first female intern at Marvel Studios, where she worked on several hit video games.(Juan Figueroa / Staff Photographer)

Dansby’s never-ending quest to push the boundaries of tech recently found her hacking a military satellite — all in the name of space cybersecurity.

“ADDVulcan” placed fourth out of 1,400 hacker groups in the government-sponsored Space Security Challenge 2020: Hack-A-Sat event.

The team’s $15,000 prize winnings will fittingly be donated to Dansby’s Women in STEM scholarship fund.

“I originally started the team because I said I wanted pink Starfleet uniforms,” laughs Dansby.

“I couldn’t have imagined it would have grown into having 20 of the top cybersecurity, Ph.D. professors, security researchers, embedded engineers, astrodynamic, aerospace engineers, science enthusiasts from all around the world. Everyone is intelligent, passionate and truly will be changing the future of space and cybersecurity.”

Dansby always wants the projects she shares to spark creativity and inspire people to change something in their lives. It’s also how she learns.

“I love it when people say: ‘You work on all these cool things — I don’t know how to do anything like that,’” Dansby says. “I tell them, ‘Neither did I.’”

She encourages others to hack the future they want by “saying yes to doing more” based on their own interests — be they computers, video games, fashion, movies or sports. Find a supportive maker community to learn, ask questions and exchange ideas, and don’t get discouraged, says Dansby, who believes “making leads to more making.”

“As I always say in my work, ‘Nothing is really failure; it is just this iterative process of improving until you reach success.’”

WATCH Amie Dansby on ‘Lego Masters,’ which is re-airing Saturdays at 8 p.m. on KDFW-TV (Channel 4) or stream the entire series at fox.com/lego-masters.

Amie Dansby and her dog, Indy, make some changes to Dansby's interactive Lego wall.(Juan Figueroa / Staff Photographer)

The Fab Five

Meet Amie Dansby’s tech heroes, in her own words.

Amal Graafstra (technologist, author and double RFID implantee): Amal has let me pick his brain, shared his knowledge, and is truly on the frontier of biochip implant research.

TQ Jefferson (vice president, games and interactive experiences, 20th

Century Studios): My former boss and mentor at Marvel Studios. He started a unicorn army the day Marvel hired me as the first female intern in the video game department. Over the past 10 years, I’ve stayed in contact with him, and I wouldn’t be where I am today in my career and personal life without his guidance and encouragement. “What do you do with your unicorn powers?” is a quote from TQ that I strive to remember and practice.

Limor Fried (electrical engineer and founder of New York City-based Adafruit Industries, an open-source hardware company): Many people starting out in hobby electronics will quickly find their way to Adafruit’s web page, which is full of hardware, tutorials and code for arcade, 3-D printing, cosplay, LEDs and motion sensors. I promise you can find your next adventure at Adafruit. She sets a high bar of how a company is run … and brings excitement to learning hardware that has changed my life.

Kitty Yeung (creative technologist): A hardware engineer in applied physics who also makes amazing integrated wearable technology. Kitty’s research in quantum computing hardware is inquisitive, and her approach to educating is amazing. She has great sketches. Everyone should check out artbyphysicistkittyyeung.com. She truly is a unicorn in the tech world.

Elon Musk (engineer, industrial designer and entrepreneur): To boldly go where no human has gone before, Elon Musk envisions the world for what it could be.

Helen Bond

Start building

There may never be a better time to pick up some Legos. Research shows that doing a creative activity, even for a short time each day, can improve our well-being, notes Abbie Headon, author of *LEGO Build Yourself Happy: The*

Joy of LEGO Play. (Penguin Group, $12.99). You don’t have to be a child or AFOL (Adult Fan of Lego) to play with Lego. No experience is required to reap the following rewards:

Get creative: Playing with Legos can open the mind to new possibilities, hone creative skills and help you find innovative solutions in other areas of life.

Learn to collaborate: Building together with friends and family can make you a stronger communicator. You’ll naturally share ideas, negotiate rules and build empathy.

Exercise the mind and body: The tactile joy that comes with building a set or making your own creation out of little plastic bricks uses sensory-motor skills that nurture a healthy and active body.

Improve cognitive skills: Strong cognitive skills make it easier to solve complex tasks. Working with a pile of Legos improves concentration, problem-solving, working memory and flexible thinking.

Get in touch with your emotions: Engaging with your creative side can help you cope.

Practice mindfulness: Consciously living in the moment by concentrating on a simple build with multicolored bricks is a way to reduce stress. It’s also a way to unwind and feel more Zen.

SOURCE: *LEGO Build Yourself Happy: The Joy of LEGO Play*

ONLINE

For daily challenges, new ideas and live build-along sessions, visit lego.com/letsbuildtogether.

UPDATED at 10:20 a.m. June 6 *with information on the Space Security Challenge.*