Under the High-Tech Big Top

Nancy Bennett (CFA’80, COM’83) is building a new kind of carnival to inspire children.

Each morning Nancy Bennett leaves her home in the Hollywood Hills neighborhood of Los Angeles and drives 10 miles to a job that most desk jockeys would covet. Her office is a cavernous studio in a 5-story, 4,500-square-foot brick building that once housed the Edison power plant, where she’s surrounded by an industrious band of entrepreneurs, inventors, engineers, programmers, designers, roboticists, and game developers. There’s also a physicist. And one former circus performer and champion whistler.

Bennett, a former entertainment executive and television producer and director, and this team of technornerds are known as Two Bit Circus, a think tank that will never be confused with the Brookings Institution, but whose latest project may be just as relevant. The project, STEAM Carnival, is a reinvention of a traveling amusement show, aimed at sparking an interest in science, technology, engineering, the arts, and math—or STEAM—among children. So far, the group has conceived and built more than 40 interactive games for the carnival, which they plan to roll out in Los Angeles and San Francisco in 2014, and expand to other cities in 2015 and beyond.

The games combine nostalgia with 21st-century wizardry—lasers, robotics, and electronics.

Her job “is everything you want in your workaday world,” says Bennett (CFA’80, COM’83), who, as executive in charge of production, has many roles, including overseeing video, film, and game production, developing content for TV and web, shaping Two Bit Circus’ communications and business development, and lining up investors. “It’s Willy Wonka meets Q’s lab in 007 meets Pee-wee’s Playhouse, with a German expressionist twinge of mechanical engineering.”

Bennett, who also teaches in the College of Communication Graduate Program in Media Ventures, says her experience brings something that was missing to the team. “I have a lot of start-up, management, and creative and production skills, acquired tools—some really refined, some learned by the seat of your pants.”

The daughter of a physicist who taught at Yale for 40 years, she was a tinkerer at a young age, taking apart her father’s tool kits, learning how to solder. Music came easily, too, particularly the French horn. In high school, she participated in the Boston University Tanglewood Institute, a summer training program for aspiring musicians. She studied with several Boston Symphony Orchestra horn players while earning a degree in music at the College of Fine Arts.

But much as she loved playing music, Bennett felt the tug of a different career. She wanted to write screenplays and make films. Two months after graduation, she gave up the instrument, and three years later, earned a master’s at COM. Since then, she has held several positions at the confluence of entertainment and technology. She cofounded the company Zeitgeist, which produced music videos, including the B-52s’ “Love Shack” and the Beastie Boys’ “Hey
playing with it and exploring it, sharing it with others is how you learn.”

Bennett joined Two Bit Circus a couple of years ago after meeting cofounders Brent Bushnell, an engineer and entrepreneur whose father, Nolan Bushnell, founded Atari, and Eric Gradman, a circus performer and champion whistler who’s also an inventor and roboticist.

Her desk—actually a chef’s prep table that allows her to stand—is situated near a 20-foot-by-20-foot platform that divides the office. On one side are desks and game developer workstations; on the other is the machine shop. Two Bit Circus employs about 25 people, plus freelancers as the projects dictate, and they work collaboratively amid a consonance of sound: hip-hop, jazz, or classical music playing all day, backed by the buzz of table saws and the whine of hydraulic lifts.

Last April, the company launched a Kickstarter campaign to raise money to build games for the STEAM Carnival. (Bennett directed the video.) A little more than a month later, it had reached its goal of $100,000, raised from more than 1,100 contributors.

Bennett and the Two Bit Circus team envision the carnival as a “live, populated, interactive technology spectacle.” When kids toss rings onto a milk bottle, they detonate a small—and contained—fireball. “It’s a modern spin on old ideas,” she says. In another game, players sit in a rolling chair while laser meteors are projected onto the floor. With a handheld mobile device that acts as a firing tool, they “explode” the meteors, all while trying to avoid being struck. The games have an educational component. Pixel Toss, for example, is a multiplayer game that uses projection mapping to stimulate kids’ practical understanding of geometry.

“There is a passion for the circus as an icon in our culture, and game play is certainly a part of that,” Bennett says.

The STEAM Carnival will offer educational materials, including kits that allow children to create their own high-tech games and that will be introduced into school curricula.

Bennett says the carnival “is an opportunity to get kids engaged and inspired by what can be done, so that we help ignite the next generation of scientists, technologists, engineers, artists, and mathematicians.” And it’s not a bad place to work. “These guys are the nicest, smartest, most fun, happy, accomplished, supportive people I’ve had the pleasure of working with,” she says. “It’s just a blast.” Cynthia K. Buccini