

Musician, CAD Expert

Having survived boot camp by realizing that it was a mind game, Michael Allen describes his past role in the U.S. Army as one of the best jobs of his life. Although not aware of his autism at the time, his comfort with the Army makes perfect sense to him now. “The Army has a manual for everything,” said Allen. The structured, organized environment left no doubt about what to do or say, or how to act at any given time, because it was all written down.

At the age of 50, with no close friends and no local support base, Allen started to take stock of his life and try to discover why he had become so socially disconnected. An Internet search of the phrase “socially disconnected” brought him to dozens of pages describing Asperger’s Syndrome (AS) and other autism spectrum disorders. When he asked his physician how to go about getting evaluated for AS, after a bit of research, she determined it was a job for a psychologist. She gave him the contact information for an area psychology clinic that had a resident psychologist specializing in adults and adolescents with Asperger’s Syndrome. After a thorough evaluation, the psychologist found that Allen fit all eight of the main diagnostic criteria for AS, - even though a positive diagnosis only requires that three criteria are met. This new awareness would give him a better self understanding and an expanded support group and even led to a marriage engagement.

Allen had always been told that he had a different approach to life, but that was never an issue for his family. Although at the time (during the 1960s and 1970s), few people knew about Asperger’s Syndrome, it was clear that Allen tended to focus on his interests to the exclusion of everything else. His parents always gave their complete support to all of his special interests - from the space program, to mathematics, to music - but made sure that those interests didn’t interfere with his eating, sleeping, going to school and playing with friends. His mother, especially, gave him plenty of guidance regarding how to act in social situations. Politeness was always expected, as she made it clear that there was no excuse for bad manners.

After graduating with honors from the University of Wisconsin, Eau Claire, in music education, his first job as a substitute band instructor required him to interact with 250 kids each day. The social interaction was exhausting to him, so he soon realized he needed to find another outlet for his passion for music. Allen then acted on a mentor's suggestion that a good musician could always qualify to play in an Army band, so he auditioned, was accepted and subsequently enlisted in the U.S. Army.

For five of his seven years in the service, Allen was a drummer in an international military jazz band, stationed at the Supreme Headquarters Allied Powers - Europe (SHAPE) in Belgium. One of his former instructors from the Army School of Music had called him at his initial posting, at Fort Sill, Okla., to say that they were starting a new band to be based in Belgium, and asked him to join the ensemble. He said yes, was stationed in Belgium and for five years toured Europe with the band.

After leaving the Army in 1991, he settled in Minneapolis, believing that the community would have many opportunities for him to play music professionally. It soon became apparent to him that, even though he possessed all of the necessary technical skills to work as a professional musician, actually finding work depended on a set of social skills that he did not have. "You can be the best musician around, but if you don't know how to go about meeting the band leaders, you are simply not going to get hired," said Allen. "In the Army, they always told us that if we were not advancing in our chosen career path, the sensible thing to do is to retrain, to learn some new skills or choose a different career."

Quickly aware that he was not reaching his goal, he followed the Army guide and sought retraining. With a day job researching and filling sheet music orders for Schmitt Music, he began taking evening classes in mechanical drafting and Computer Aided Design (CAD), the programs that were becoming the state of the art computer design tools for engineers and architects.

Allen's skills in three dimensional designs were admired by a fellow classmate, an inventor and business owner, and this connection landed him a drafting job with his classmate's company. Allen completed his CAD training while working at his new job. He also began to teach himself to use other computer graphics software, such as Adobe Photoshop and Illustrator.

In 1997, after two years with the company, he looked for a new challenge and found that his skill sets perfectly matched a help wanted ad for CAD and computer graphics skills needed by Skyline Displays. Based in the Twin Cities, the company creates unique and dramatic vendor booths for trade shows and exhibitions.

At Skyline, Allen's work involves creating 3-D computer models of the vendor booths, and then using those models to produce detailed layouts and setup instructions for each project. His official job title is Layout Drafter, but Allen is known in-house as a technical illustrator. He works on close to 20 projects at one time, all of which are in varying degrees of completion. With each project, Allen is paired with a project estimator and project manager.

The lead time for a job can be from two weeks to several months and Allen is totally responsible for his own work and for getting the project completed on time. Since the project due date is usually centered on a specific trade show, the deadlines are absolute and cannot be missed.

Allen considers his CAD training to be most important to his job, but said his natural interest in mathematics, especially geometry and trigonometry, is also helpful in his job, but not essential. A thorough understanding of the software program and all its unique aspects is a very valuable skill to perfect, since the program itself can apply its built-in formulas. Having a working knowledge of structural requirements and manufacturing techniques is also valuable for this type of work. Allen mentions the critical nature of understanding the company's products and capabilities.

In addition, he does extensive beta testing of the CAD software he uses, to ensure that each new version continues to meet Skyline's needs. When it comes to software testing, Allen has taught himself a testing routine to make the product fail and then trace back each action to understand exactly what caused the software to fail. Allen describes the activity as problem causing, not problem solving, as he uncovers how the software doesn't meet standards. He then communicates with the software developer about these issues, so that they can be addressed prior to the software's release.

He considers personal discipline as being very important to keeping on track. Allen finds that he sets specific rules for himself just to keep him moving in the right direction. He sets guidelines for when to get away from the computer at night and an exact routine that gets him to bed on time. This built-in discipline keeps Allen working in the right direction to maintain a balanced life. He needed to make his own schedule and build a daily routine.

Since his diagnosis of Asperger's, Allen has worked to gain a better understanding of his habits and tendencies. Support groups with others on the autism spectrum have given him a support network in which he has gained insight and direction and, in turn, is able to give others encouragement. His efforts to get more adults on the autism spectrum involved in local support groups caused him to meet Carrie, his fiancée. They are currently house hunting and plan to marry in the fall of 2011.