

As a child my house often resembled a maker space: an in-progress quilt lying on the kitchen table, stacks of family photos on a desk waiting to be arranged in their new album, a newly sealed rudder drying in the carport for its hodgepodge sailboat. Glue sticks, sewing needles, paint brushes, and drills were waiting to come to life when my parents got home. Nothing was ever abandoned, only left in progress. Visiting my grandparents was no different, just with needle points, table glue-ups, and engines strewn around their houses and garages. Best of all was everything I learned from being surrounded by this happy chaos.

My room was always well organized, everything with its place, but when I went to work on a project the LEGOs and cardboard were out and the floor was covered. The room transformed itself into a Rube Goldberg machine of ramps and marbles, a furniture and blanket castle, or a stop motion scene for a daring escape. Each project wrapped up as the room returned to its neat state, but being able to see the carpet again only meant I needed to find the next thing to build.

Today that pile of LEGOs on my desk has been replaced by breakout boards and wires as I make an Arduino game console or an LED strip desk light. The maker space that is my life spills out onto the front porch where wood scraps pile up around the miter saw as I build my desk and climbing wall. More frequently, the mess of a project in progress is contained by my computer: Solidworks and G-code editor windows crowd my monitor as I design jumping frogs and water gun nozzles. A browser fills with Stack Overflow tabs as I write code and fix bugs for my website just so I can catalogue the list of what I have made. Now that my skills have advanced, I am building things for others. Hundreds of megabytes of public college data sit on my desktop, not just for my own college decision, but for a website a classmate and I made called collegematchmaking.org to help any student rank colleges they are considering. LIFT Aircraft's Hexa, an 18 blade single person carrying drone, stays in its hangar while I code an Arduino to sort and log its diagnostic messages, streaming past at hundreds a second, for my contracted work.

To fuel this creative engine, I learn new things. I have taken all my middle and high school's computer science courses and more outside of school. I have taken Duke TIP engineering, architecture, and graphic design courses. I was in the first class of my high school's new woodworking course. Every project, large or small, begins with enough research for its own sketch, bill of materials, and folder full of data sheets before I buy anything. When problems arise, I have perfected the art of looking into the past to learn from those before me and adapting their solutions to my own use, learning not in a structured environment but through trial and error. I know how to build, but more importantly, how to improve, and I could not enjoy it more.

I come from a family of makers and I am no different. I strive to create, to make lives easier, and to benefit the world. I have this innate urge to create, to be a part of something bigger by building something better and so I keep looking for more and I will not stop in college and I will not stop after that. It is my sense of purpose and what I hope to leave behind when I am gone. Whether that be just a desk I can give to my children, a hand in designing the future of air transport, or the next thing I have not yet thought of, I will keep creating.