AIDAN CHANDRA MAKER/INVENTOR HISTORY

4th grade: Built first desktop computer.

5th grade: Used Google Sketchup to architect houses and electronic devices.

Built and configured a Minecraft gaming server to host friends.

6th grade: Built several gaming PCs and servers for teachers and friends.

7th grade: Built a wireless Network Attached Storage (NAS) device with two 2TB RAID 1 arrays.

8th grade: Built for 7th grade science teacher: a temperature, humidity, and barometric pressure sensing device with custom 3D printed enclosure.

Built FM radio station, smart clock, Wifi solar weather box, WiFi lamp switch using Python, LED jewelry for my mom, and a backup iPhone battery.

Built a vintage Gameboy handheld gaming device.

Started a mobile phone app for food allergy sufferers.

9th grade: Built a heat transfer accelerometer. Delivered PowerPoint presentation. Submitted 4-page paper describing the fundamental physics principles for Honors Physics final.

Authored 4-page paper describing AC/DC converters with detailed diagrams and step-by-step explanations.

Filed provisional patent for a med device with temperature sensors that communicates via Bluetooth to mobile apps to protect medicines from spoiling.

Built a dummy variable constant current load, an Arduino-based dummy load connected to a laptop with USB communicating through serial. Wrote a Python program to connect and control the device.

Experimented with analog circuitry (negative feedback op amps, variable gain op amps, digital-to-analog converters, and analog-to-digital converters).

Designed, tested, and completed a precision analog power supply.

10th grade: Filed patent for my Bluetooth-connected medicine protection device.

Designed and built a triple output precision linear analog power supply.

Built a heating/cooling incubator (used Peltier Modules).

Built a custom Sous Vide cooking appliance.

Created software tool to help classmates prepare for Honors World History & Bio tests.

11th grade: Built affordable garden and farming sensors. Launched www.GardenSense.net, an opensource project to increase adoption. Implemented at Priory's Franklin Garden.

Made my extended family sets of five walnut-birch coasters as Christmas gifts.

Began developing a completely analog circuit block to draw a constant amount of power with a variable voltage input.

12th grade: Built for a friend with post-concussion PTSD, a thumb-drive sized device that tucks into a baseball cap and detects sudden movements that may have concussive impact.

Developing GardenSense 2.0 w/WiFi option, lowered costs, dramatically improved battery life, all in a smaller form-factor. Using Chinese contract firm to manufacturer the PCBs.

Experimented with the MSP430 and briefly experimented with AVR C.

Experimented with rescuing over discharge lithium-polymer and lithium-ion.