

# BUILDING MASTER PCS

*Sophomore Grady Allen, disappointed with manufactured PCs, prefers to build them himself to have the best performance*

## CLINK, CLICK, THUMP.

Sophomore Grady Allen grimaced as his 3-millimeter screw bounced between the parts of his Windows 10 that he'd been building for the past two hours. After falling through a hole no wider than his pinky finger, Allen knew from experience that it would take at least another hour to find the screw.

Allen stood over his computer with his body almost blocking out the light from his desk lamp. Flashlight and screwdriver in hand, he surgically picked apart the PC lying flat on his desk and emerged an hour later, triumphant with the jelly bean-sized screw between his fingers.

"I mean you're hunched over [the PC] the entire time," Allen said. "You can't see what's in there," Allen said. "I just put my phone flashlight on the side of the case to find the screws if I ever lost them, but that's definitely one of the worst parts."

Not wanting to rely on overpriced and sometimes defective manufactured parts, Allen has spent the last eight years fascinated by how the intricate and complex parts work together putting together his own computers.

He doesn't mind the tedious work — taking apart the machine over and over again — as long as it eventually meets his standards. Even when it means continuing to modify the same computer he's had for the last four years, installing countless replacement parts and making miniscule adjustments just to achieve a faster processing speed.

"Manufacturers like to put limits on things like your cars, putting limits on your speedometer and your engine," Allen said. "But [manufacturers] forget other factors in things like the mechanical components in

the actual computer, cooling methods, or the software it's running, which means they're going to set a limit that's way lower than what I could actually output safely."

Allen's problems with computer manufacturers started when he was 12, right after he put together his first PC, immediately faced with problems for a part he'd ordered online — the fragile glass screen that came in the mail ended up cracking down the middle on the same day he got it.

"The piece that broke on the glass panel was a screw the manufacturers had put on wrong," Allen said. "I just replaced it with some plexiglass. I cut out my own strip and then welded it on, since it was just easier that way."

This common mistake among the professionals was easily fixed by a middle schooler.

"I realized that for prebuilt PCs nowadays, because of inflation and everything, parts are stupidly expensive," Allen said. "[Manufacturers] also charge a \$300 building fee for it. So I was like, 'You know what?' I can do better."

Since completing his Windows 10 four years ago, Allen customized his PC interior lights, a higher-resolution graphics card and installed the most recent software to get the best performance. He increased the processing speed to improve graphics and provide top-notch detailed gore for his favorite video games.

"I enjoy the DIY aspect [of building computers] because I realized if you know how to do it yourself," Allen said. "You're not going to be paying these massive fees towards these big companies who could screw it up and screw you over."

Allen credits his 22-year-old cousin Gage Graham — who builds computers for a living

at CLX Gaming — for igniting his passion for building computers. Graham remembers one family gathering where he was working on his PC when a young Grady looked over his shoulder.

"This was before [Allen] had his own PC and he was curious because I had mine out," Graham said. "So I partially took it apart and told him about it. I took off the case panels and showed him all the parts it needed."

That summer, Allen walked door-to-door down his street bugging his neighbors for anyone who needed their lawn mowed, working all day so he could afford the components needed to build his own PC.

"I worked my butt off up and down my street and created my own little lawn company," Allen said. "Once I made enough money, I ordered all the parts at once so I could finally build my Mach 1."

When Allen finally put together the components and wiring to build his first computer, his parents and Graham weren't surprised.

"I've helped a lot of people [build their own] computers, but they usually don't get into computers after, so I didn't expect [Allen] to," Graham said. "But when I finally figured out he got into it, it made me happy because there's not a whole lot of people in my family that know [computers] and people you can talk with about the nitty gritty."

He became the unofficial IT guy for all his friends whenever they had questions about their PCs or needed his help to build it from scratch — sophomore Matthew Waters asked Allen to build the PC he uses today.

"I had talked to some of my other friends who he helped out and they all said that they hadn't run into any problems," Waters said. "It was a much better upgrade compared to my previous console."

Allen continues to improve his computer, chasing the level of intricacy he sees in Grams builds that originally inspired him to pursue his interest in computers. He doesn't care if he has to spend his weekends upgrading his parts and installing unique aesthetics like internal lights, even if it costs him a few extra bucks.

"Building a computer, to me at least, is like an art form," Allen said. "You can choose whatever you want to do with it. You can go down any route when picking the actual case of it or the outer shell lights inside. I can do literally anything."

## PCSLANG

Definitions of common computer slang

### OVERCLOCKING:

- pushes limits set by manufacturers for processing speed
- extend system's life

### MICRO ATX:

- common cpu case with increased performance

### MOTHERBOARD:

- main printed circuit board (PCB) in a computer
- connects all the wiring and components

### THE SCEPTER:

- tiny screwdriver he used to install all his screws.
- they have a magnetic head so he wouldn't lose the tiny screws anymore