



The list below summarizes IT trends discussed by the National CTC's BILT (Business and Industry Leadership Team) at the August 2023 meeting. The purpose of these "trend talks" is to keep faculty – and their students – informed on the ever-evolving IT landscape.

1

**Many data centers will – for now – remain on-prem.** One employer noted that years ago his company predicted computing would be 50% in the cloud, but today they are nowhere near that level of adoption. It could be another four years before we get to a 50/50 split between cloud and on-prem. Many businesses remain reluctant to move their data into the cloud, especially for "mission critical" work. For those who do opt for the cloud, many will use individual hosted cloud solutions they can control rather than moving to a public cloud provider. Another employer noted his company once used three cloud providers – AWS, Azure, and Google – to split the workload and also because each one did certain tasks better than others. Ideally, students are learning more than one cloud provider.

Learn more: <https://techcrunch.com/2023/04/16/public-cloud-back-on-prem/>

2

**Some schools are embracing ChatGPT in the classroom.** Educators are understandably concerned about ChatGPT's ability to offer quick answers and plagiarized essays. But many schools are integrating ChatGPT into the coursework, treating it as a workplace tool and teaching students how to use it appropriately and ethically. One instructor using ChatGPT in a Python class noted that he focused on the programming process, rather than the programming outputs. In fact, he considered that using ChatGPT gave his Python students more confidence than they might not otherwise have. While employers applauded schools that embrace ChatGPT, several noted that AI tools should never replace an understanding of IT foundations. ChatGPT cannot become a crutch.

Learn more: <https://time.com/6300950/ai-schools-chatgpt-teachers/>

3

**Businesses are considering "headless solutions" for data science needs.** Small and medium businesses are not spending money on big monolithic services from the likes of AWS and IBM. They want small "pinpoint" mission systems and ERPs (enterprise resource planning) that are "headless" and offer full autonomy without costly contracts and license agreements. One employer noted that there will be jobs in this space.

Learn more: <https://www.cream-touch.com/blog/what-is-headless-solution>

4

**AI is not killing jobs.** One employer explained that he reads articles all the time about AI and robots will take away jobs. He called those stories untrue. He admitted that jobs will be eliminated and repurposed, but he believes that humans will still need to be in the loop. Jobs will evolve and change and many of those will need certifications and new training. The time is now for educators to work with industry and government to help prepare students for those changes. For example, until robots can install and maintain sensors, there will be a need for well-skilled human mechatronics technicians who will be in the field using their hand).

Learn more: <https://spectrum.ieee.org/ai-taking-over-jobs>

Learn more: <https://www.businessinsider.com/chatgpt-ai-will-not-take-jobs-create-future-work-opportunities-2023-2>

For a deeper dive into these topics and others, download the August 2023 BILT meeting minutes, which can be accessed for free here: <https://nationalctc.nationalctcwiki.org/bilt>.



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