National BILT Meeting Minutes
"Mega-BILT" Trends Discussion

MEETING DATE: **Tuesday, April 29, 2025**	MEETING TIME: 10:30am-11:30am Eastern	MEETING PLACE: Zoom
RECORDER: Mark Dempsey	RECORDING: Available upon request	PREVIOUS MEETING: AI KSA vote meeting – March 4, 2025

MEMBERS PRESENT

BILT:		
Laurabeth Barker, CODE Staffing	Randy Dineen, Infoverity	Lee Rosenfeld, McGraw Hill
Brent Blawat, New Resources Consulting	Robert Hitchins, MV Transportation	Dan Tuuri, TrueNorth Companies
Stacy Brandenberg, Hye Tech Network and Security Solutions	Lynne Reynolds, Milestone Technologies	Craig von Collenberg
Carolyn Corbin, Center for the 21st Century	Mark Richter, Hitachi Digital Services	Kim Yohannan, MongoDB
Brian Cunningham, Strategies	Gina Riley, Gina Riley Consulting	Teresa Younkin, Mosaic Life Tech
NITIC staff: Ann Beheler, Mark Dempsey, Christina Titus, Larry McWherter, Stephanie Schuler, Alie Hernandez, Diane Meza, Leah Palmer, Deb Hecht, Rajiv Malkan, Kyle Jones, Andie Bonkowske		

Agenda items	Discussion
NITIC and BILT overview	Larry provided an overview of the NITIC grant, then explained that today's meeting aims to discuss the current state and future trends of the IT industry. NITIC would also like feedback on the best practices IT students should follow when looking for a job. Larry told the BILT members that their anonymized feedback is widely disseminated to educators nationwide. He also noted that educators on the Zoom call are invited to listen actively; educators can post questions in the chatbox. Larry told BILT members that their feedback leads to direct action by NITIC. As a result of recent BILT discussions, NITIC is planning a Working Connections track in fall or winter, covering generative AI skills, and a track in winter covering non-technical soft skills. Ann next provided an overview of the BILT (Business and Industry Leadership Teams). BILTs are business advisory councils that are structured and repeatable. BILTs put employers in a co-leadership role. BILTs help align curriculum to workforce needs, but they also help build relationships between educators and employers. Today, NITIC is asking BILT members to look into their "crystal ball" and answer questions about trends.
Trends: What Keeps You Up at Night?	Ann posed open-ended discussion questions to the BILT group: "What keeps you up at night when you plan for the future? What are you most concerned about in terms of trends that are going to affect your business?" One employer explained that his role was to handle the IT responsibilities that businesses "typically don't like." They have two layers: the logic compute layer that keeps the business running and the infrastructure layer that it runs on. Both layers create their challenges. Can you keep the programs bug-free? Can you keep the infrastructure secure? There are so many vulnerabilities. Microsoft, over the last year, has had outages where their cloud just "went

	away" and left everyone in the lurch. It's this concern about maintaining business continuity that keeps him awake. Cloud service outages: https://www.forbes.com/sites/emilsayegh/2024/07/31/microsoft-and-aws-outages-a-wake-up-call-for-cloud-dependency/ Chatbox: "Third Party Risk Management is a part of nearly every conversation I have. Worth reviewing a recent post from JP Morgan on risks to SaaS: https://www.jpmorgan.com/technology/technology-blog/open-letter-to-our-suppliers" Another employer expressed concern about the challenges colleges face in discerning between students doing the work and those using AI to do the job for them. A few years from now, what sort of applicants will be interviewing? They may have good interview skills, but do they genuinely have the skills their degree says they have? Ann noted that schools cannot keep AI out of the classroom. Many programs insist students explain a project's step-by-step details to prove they understand what AI created. That same employer told the BILT that his recent graduate son was penalized in his coding class for collaborating. He failed that portion of the class because he got help from a classmate. This was upsetting because collaboration is a requirement in the business world. Another employer is worried about communication skills. Can students define a business problem? Can students explain their solution? These are essential skills. The employer also noted a trend of students not taking deadlines seriously because they may have gotten away with frequent extensions in school. Another employer explained that he builds skills maps and then helps post-secondary schools align with the skills the industry needs. He's seeing an ongoing need to teach soft skills, or "durable skills." This is not easy. In the past, these skills would have been learned in early jobs, like customer service in a fast food job. That's not happening now. He thinks it's hard to teach these in a classroom setting, which is widening the "durable skills gap." On the technical side, he's concerned about the speed of innovation. The processes a college has to go through to align with these skill maps take time. He wants to find a way for education to move more quickly and pivot. Ann replied that education is faster than it used to be, but outside agencies like accreditation bodies and state legislatures can sometimes slow things down. One employer countered that "the speed of innovation isn't as fast as people think it is." He hasn't seen anything new; he's only seen new implementations. The industry distributes, and then it comes back. It goes through cycles. We can sometimes get lost between what is marketing and what is technology. Currently, IT is in the distributed mode, and everything is going into the cloud. He doesn't think the industry would have these problems if students learned foundational basics and understood the technology. He has developers who don't know that it takes time for a signal to go from point A to Point B. He has vendors that don't understand that a posted message is not 100% guaranteed to reach its target. He wishes the basics could be taught more effectively. Another employer agreed that foundational soft skills are not taught at home or school. He thinks there may be a culture of entitlement. As in, young people think it's easier to get to quick money on social media than it is to put in the work. Communication and collaboration are the core skills that are most lacking. He proposes that community colleges integrate more with the K-12 system to push the skills down. Many of their attitudes are already set by the time students graduate from high school. Community college may be too late to teach interpersonal and work ethic skills.

Trends: The Job Application Process	Ann noted the importance of group projects and presentations to build soft skills. Chatbox: https://medium.com/the-structural-skills-project/stop-calling-them-soft-why-structural-skills-are-the-hard-currency-of-the-ai-era-bf4ccc02a329 One employer noted a trend of AI-generated resumes that contain hallucinated skills that don't exist. His company spends a lot of time trying to validate those skills for their customers before the interview. He also noted that while social media apps like TikTok and Instagram are widely used, younger people don't like building LinkedIn profiles. The recruiters he works with spend much time on LinkedIn. A technician he was working with recently expressed apprehension about using LinkedIn, but that is where many recruiters will find talent. Chatbox: "Another worth looking at is the problem of AI-developed software using misaligned or missing packages and libraries. A great graphic at the top of page 4: https://arxiv.org/pdf/2406.10279" Another employer talked about the value of in-person networking. Students need to find user groups. Meet people. Even if you don't fully understand what's happening, if you're interested in the topic, find a seat. The people in that room will be looking for people to hire. As you network, your network grows, and your interpersonal skills grow. It's not always what you know, but who you know. You never know what opportunity might come out of an in-person gathering. Chatbox: "Advice: Email the decision-maker directly to offer an introduction and resume, versus solely relying on HR as the filter." Another employer talked about HR departments using AI and applicant tracking systems. The barrier to entry has gotten bigger. Many large companies – and even smaller ones – are doing this. There are so many resumes coming in, they need the applicant tracking systems to help decide which one should even get looked at. He tells his mentees to use AI to customize their resumes to fit the position they're applying for. That way, you get past that initial automated screening. He reiterated comments about LinkedIn's value – many times, one of his students will contact him on LinkedIn and ask for advice, and he always says "yes." He thinks those proactive students are finding jobs quicker because they are building their network. ATS: https://www.collegerecruiter.com/blog/2025/04/01/why-you-didnt-hear-back-how-applicant-tracking-systems-score-rank-and-quietly-reject-job-seekers Another employer strongly agreed: if a student graduates without any network, "they are way behind." They are at an "extreme disadvantage." Chatbox: "We [a large multi-city organization] use resume 'filters' to search for keywords within resumes to screen for candidates to interview for a specific role. So, tailoring a resume to include specific keywords related to skills and technologies so that they at least get the call back is key. And don't be afraid to highlight skills acquired, not just jobs held, when getting started in your career. And this can be unpaid or volunteer work, not just paid work." One employer shared that she'd been recently laid off. She found her new job through networking. She speaks to many student groups and always tells them to network with her. If she's connected to them on LinkedIn, she can make connections and referrals and offer help. More and more, students are taking her up on her offer. She also suggests students consider hackathons or datathons where they can meet people, practice presenting, and demonstrate

	their skills. Employers do sometimes recruit from events like that. She asked her HR team about how students can stand out. HR suggested that students "put themselves out there" and ask a question at a panel presentation or a guest lecture. Students should seek out "informational interviews," which are a way to connect with someone new on LinkedIn. You plant a seed with a company you want to work for. If there's an opening, they think of you. Ann wondered how educators can teach students to "network with their network." One employer suggested a format like speed dating, where students can rotate through several employers. This could be virtual or in-person. The key is to let students ask questions and allow employers to talk about their careers. Get everyone talking. One employer suggested connecting students from disciplines that don't normally get together, like data students and coding students. Encourage them to collaborate. Another employer liked these ideas but emphasized the need to create context so students have a reason to care. He thinks letting students hear success stories from employers would help show that these strategies are worthwhile and productive. He also encouraged using a project-based learning model for networking activities. Create projects with technical skills and then bring in employers. This should be part of a class and not a stand-alone event. Another employer stated that if the goal is to help align students find jobs, they cannot rely on job boards. Companies are grappling with applicant tracking systems and people "gaming the system" using keywords to get through screenings. New graduates are up against hundreds and hundreds of entry-level resumes. She thinks schools need to teach students how to network. Students have to know what they want and why. They must be able to tell their story, which goes back to soft skills. Students need to project an "executive presence," which is all about how they show up, look, and communicate. Her daughter will graduate this May and fill her summer calendar with coffee dates to meet people, get referrals, and start conversations. She's not going to ask for a job. She's having informal discussions. Chatbox: "Have a career fair coming up? Make sure to send a note to recruiters and hiring managers a few days ahead. 'I am excited to see you're attending and look forward to meeting you.' Of course, adding a note regarding why or something interesting the company is doing can also help." Chatbox: "Application and readiness: be humble, be hungry; show your end game, but recognize you're not there now; showing projects and accomplishments, metrics; communicating your whys; being able to demonstrate something that makes you unique beyond just a credential; getting involved in local user groups, meetups, conference attendance, etc."
Trends: Landing the Job Interview	One employer noted that there will soon be two kinds of jobs. One kind will be jobs where we go outside to hire talent. These would be fields like AI, machine learning, or data science. The other kind of job will involve upskilling opportunities within the organization. In health care, she's seeing interns and college students hired to work on side projects to help companies with AI projects, then get hired after graduation because they have started building skills and organizational knowledge. They have value to the company. She likewise sees students do their practicum with companies doing AI data science projects. When they complete their degrees, they get hired. She also recommends students learn how to take a step back and not "get in the weeds" about their skills. Focus on your broader capabilities. You can say "I can program in SAS or

Python or this or the other," but you've got to take that step back and say instead "I understand language, so it'll be easier for me to be able to translate between what the business is looking for when I write requirements."

Chatbox: "More generalized outcomes are so helpful. 'Deploy Microsoft Server' is different from 'Deploy Windows Server' — 'Configure system automation' is different from 'Configure BASH scripts.'"

Chatbox: "Drawing a relevant line between a student's skills and how they have used them in projects, and then how that makes them a good problem solver. Companies need problem solvers and communicators."

Another employer noted the need for a "personal touch." So many college graduates are so involved with screens that you'll stand out if you can pick up a phone and use it as a phone or visit a company in person. Do research on the company. Find out who the hiring manager is. Show them how you can help them. That will help you stand out.

Chatbox: "We need stronger mentor programs to integrate grads into our company cultures. The work-from-home movement plays a role in the ongoing (societal) issues about Communication and the other 'soft' skills."

One employer said, "It's hard work to find a job these days." Students need to understand that. The generic application process is not going to get students a job. They need to research the company and know what they're doing. They need to tailor their resume to the job they're applying for? How does their story fit with the culture of the company? Researching is hard work, but it's worthwhile. Being prepared leads to a better interview.

Ann asked whether HR still looks for keywords. One employer noted that it depends on the size of the company. When she worked at Microsoft, they'd get 100,000 resumes a day. There's no way to go through that many without help. You have to tailor your resume to get past that process.

Chatbox: "Networking is the most proven way to get 'seen.' If you do not get seen, you can't get heard."

Larry presented a slide with additional HR-related questions for the BILT to consider.

	One employer noted that recently, some applicants have tried to use AI notetakers in interviews. This is not permitted; some interviews were cut short. Companies don't want their interview questions captured and shared to give others an unfair advantage. Another employer remarked on the use of AI. Some teams fully embrace AI during interviews and ask candidates to use AI and share their screen so the interviewers can see how they use AI. The perspective is that AI is part of the job; you can use it, so let's embrace it. Other teams, however, look at AI as cheating and forbid it. Trying to balance those two approaches can be very interesting. One thing students should consider is to focus on their thought process. Think out loud. Let the interviewer understand how they work through problems and arrive at solutions. Chatbox: "In response to the new reliance on AI, we now require 'labs' as part of our interviews - being able to demonstrate real-time a particular skill or process - building a program, configuring a system, building and delivering a workshop. So new candidates should be prepared for that." Chatbox: "The research aspect can be a great place to engage generative AI. Don't build the resume, but let it help with some of the preliminary work: 'What are recent announcements from XYZ?'" One employer agreed that discussing your thought process is a "good proxy" for soft skills. You must explain what you're trying to achieve and how you're approaching it. He's less interested in technical degrees. He ends up teaching new hires anyway. Those who can understand a business problem are the most appealing applicants. Chatbox: "Two things we have identified as critical skills for gaining tech jobs. 1) Intellectual Curiosity- Are students learning outside of school? Are they curious and finding ways to learn for themselves? Aligns with lifelong learning. 2) Technical Interviews- ability to perform in a technical capacity during an interview. Explain your work as you're doing it." Another employer responded to the post about which technical skills are hard to hire for. He said more technical abilities require "more of the art than the mechanics." Data science students, for example, need to know how to use their technical skills to solve business problems. Technical skills involve more than just learning how to use a tool. One employer explained that he used AI to interview himself in preparation for a job interview. He uploaded the job description and used this prompt: "You're a world-class interviewer. Ask me questions that would be relevant to this position." The back-and-forth discussion with AI, which included some tough questions and AI critiques and suggestions, proved helpful. He noted you can also use the speech function and talk as if you were in an interview. This process allows for multiple practice sessions. Another employer said that employers typically see technical skills "as a given in the industry." More importantly, no matter how advanced one's technical know-how may be, one's non-technical skills are related to problem solving and collaboration. Those are the difference makers. Chatbox: "My advice is simple: be honest, don't bluff. Talk to what you know, and don't claim experience where it doesn't exist. However, show confidence, enthusiasm, and respect during

	the interview. For presentation, learn to provide context first, and then offer details when asked." Chatbox: "Important that the students learn about the employer and can answer the question, 'Why do you want to work for us?' 'What are you looking to get out of the job?' 'Why should I hire you?' This employer also stressed two other things. One, it's important not to lie. The lie will be discovered and could be a mark you carry throughout your career. Don't lie. And two, finding a job is hard. Nobody wants to work; everyone has personal boundaries and rules their job needs to follow. There may or may not be more jobs than people available, but – in this employer's opinion – it seems like there are more jobs than people willing to put in the work to get the job and do it once they have it. Finding that person is the challenge. Chatbox: "We are not broadly teaching students structured ways to interview either — we are teaching them old school ways. — just doing a mock interview is not the key, teach them HOW to develop their stories and WHY they are telling them." Chatbox: "Just like teachers see AI-generated essays and reports, the poor recruiters are seeing generic, homogenized AI dribble. A student can't stand out if their resume looks the same as a couple hundred others (nor do they appear to be a problem solver, either." Chatbox: "In terms of resumes, if a candidate cannot talk through in detail something on their resume, it should not be on there." Another employer mentioned again the value of problem-based learning. He would put a team project in every class when he taught. The students hated it, but they got good at it. They ended up being thankful for the experience. These projects also offer a way to connect with industry if you use employers as project judges. What employers say carries more weight with students than what teachers say. Chatbox: "Being qualified is insufficient to land an interview or win the final job offer. Just landing an interview is the minimum bar (table stakes). It takes a lot more to win the job. There are frameworks and formulas to make effective career transitions that are far better than the 'spray your resume' and 'pray for a response.'" Another employer mentioned that because companies are doing so much internal training, they create secure LLMs to protect their IP. These companies often then use local community colleges to find experts to help train staff on using the AI tools. These "education pods" will be a larger trend because of security concerns with AI and IP. She predicts higher education will play a role in helping companies manage AI tools.
Conclusion	Larry announced that the next BILT meeting will be June 3, at which the BILT will vote on and discuss entry-level job skills in software development. NITIC will host another trends meeting in August. He and Ann thanked everyone for the time and expertise.
Next Meeting: Tuesday, June 3 (10:30am-12:00pm Central/11:30am-1:00pm Eastern) – job skills vote and discussion on software development	