AI: An Opportunity for Labor Market or a Curse?

Md. Sabbir Hossain

Recently, many reports and analyses have been created that try to predict how dynamically the labor market will evolve in response to the development of artificial intelligence. World Economic Forum, Gartner, McKinsey — everyone is trying to estimate the scale and tame us with inevitable change. The subsequent numbers cause a lot of noise and mixed moods around the AI. However, is there really something to worry about and how specialists developing artificial intelligence perceive these processes?

AI: Artificial Intelligence- Curse? or Blessing?

The World Economic Forum (WEF) has analyzed how large, international employers look at the employment structure in the perspective of 2022. Last year's Future of Work report identified jobs that are threatened with disappearance, stable roles that AI does not threaten, and that 133 million new jobs are estimated to be created. A comparison of 2018 to 2022 clearly shows that the 10% reduction in some types of jobs will be fully offset by the creation of new jobs and the emergence of new professions (an increase of 11%). In turn, 48% of today's jobs defined as universal, representing the majority of employment in various industries, will remain at the same level until 2022.

AI will not replace people. It will give them new opportunities and new jobs. The rapid development of technology, however, does not go hand in hand with its rapid implementation and social acceptance.

Over the next few years, we will see an increase in automated processes thanks to AI in environments that are structured and repeatable, which will begin to eliminate human participation in performing such roles as an accountant, post clerk or production line employee. However, remember that this will not happen overnight. In addition, ordinary

Kowalski is to prepare for a greater demand for technical, ethical or social skills, but without forgetting about creativity during strong globalization — believes technical experts around the world.

The popular discourse about the future of working with AI focuses mainly on the vision of technology that replaces people. In the meantime, it should be remembered that automation and artificial intelligence would create many new jobs. There will be positions that combine previously known competences with previously unused areas of technology and create new value on the market, while being well paid, such

as Artificial Intelligence Engineer and Machine Learning Engineer. Relatively recently, there has been a demand for specialists dealing with, for example, the area of ethics in AI, which shows how comprehensive approach to artificial intelligence is needed. This generates new jobs that we have never dreamed of before. WEF lists big data and digital trans-

formation specialists, researchers and data analysts or robotics specialists on the list of new jobs created by AI. This may surprise us a little, because these roles already sound quite familiar. However, they are relatively new and the demand for them will definitely increase. In addition, what undiscovered professions will bring the next years? Who can see this today?

The emergence of completely new professions is on the one hand an opportunity for employees, but on the other — a certain challenge, requiring the acquisition of new competences. Professionally active people do not have to passively wait

for what the future holds, but they can take care of developing their skills and acquiring new ones today. To properly prepare for meeting the requirements of new positions, which will appear along with the development of artificial intelligence and progressive automation, you should develop your competencies in two ways. First of all, it is always worth expanding knowledge about new technologies, being up to date with the latest solutions, and having knowledge about current and forecast trends. Nevertheless, machines will not replace people in areas where we will still outperform them. Creativity, teamwork, emotional intelligence or ethics are areas that will remain the domain of people for a long time and it is worth investing in the development of soft competences combined with technologies.

Writer Bio:

A security professional with over 9 years of experience in security consultation, security design, Framework Design, Policy Making, project development and execution, integration of various technologies, lawful interception system, OSINT, Digital Forensics, Cell interception system, Cell interrogation & active tracking system, safe city projects design and implementation, critical infrastructure security, tactical & intelligence solutions. He holds world-renowned certifications like, PCSS, CCISO, CEH, ISO 27001 Sr. Lead Auditor, COBIT, ITIL, Lead Pen Test professional and many others. He is currently working as an IT Policy & Risk Analyst at BGD e-GOV CIRT.
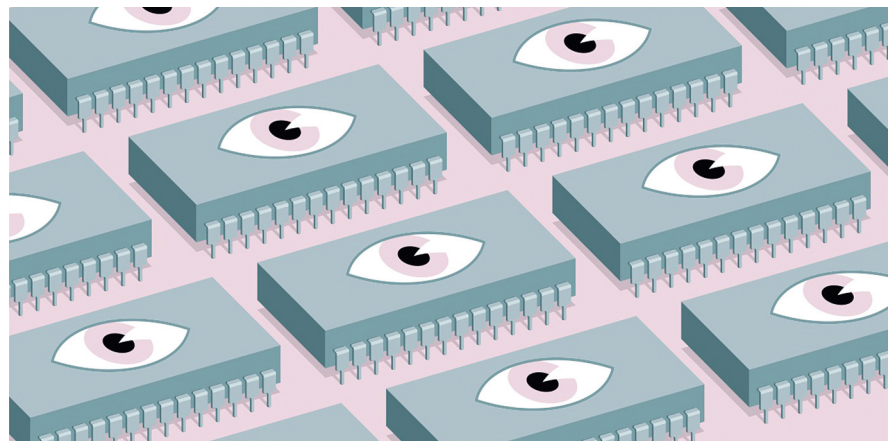
Intel CSME vulnerability allows hackers to break encryption and DRM

Security researchers have discovered that a new vulnerability present in Intel chips that have been released over the last five years is unfixable outside of replacing the hardware that's currently being used in millions of commercial and enterprise systems.

Specifically, this has to do with the Converged Security and Management Engine, which is essentially a tiny computer within your computer that has full access to all data that flows through your PC, from internal components to peripherals.

Intel has guarded the secrets of how this engine works in an effort to prevent competitors from copying it, but that hasn't prevented security experts from trying to crack their way in to see if it can be exploited by malicious actors.

The unfixable flaw was discovered by Positive Technologies, who says it's a firmware error that's hardcoded in the Mask ROM of Intel CPUs and chipsets. The problem is that Intel's CSME is also responsible

for several security features, including the cryptographic protections for Secure Boot, digital rights management, and Enhanced Privacy ID (EPID). It also houses the Trusted Platform Module (TPM) that allows the OS and apps to store and manage keys for things like file system encryption.

Researchers explained that hackers can exploit a firmware error in the hardware key generation mechanism that allows them to take control of code execution. They noted that "when this happens,

utter chaos will reign. Hardware IDs will be forged, digital content will be extracted, and data from encrypted hard disks will be decrypted."

The only recent platform immune to the problem is Intel's 10th generation, Ice Point chipsets and SoCs.

However, the good news is that the attack method described by Positive Technology is rather difficult to achieve without other factors at play, such as direct physical access to the hardware in question.

This isn't the first time someone has managed to crack open Intel's ME subsystem. Security researchers uncovered other vulnerabilities in Intel's hardware in 2017 and 2018, not to mention the Spectre-style one from 2019 and the recently disclosed CacheOut attack, but at least those are fixable.

AMD Ryzen and EPYC CPU Roadmaps

Everyone is interested in roadmaps – they give us a sense of an idea of what is coming in the future, and for the investors, it gives a level of expectation as to where the company might be in a year to five years. Today at AMD's Financial Analyst Day, the company gave the latest updates on the CPU side of the business, for consumer and for enterprise.
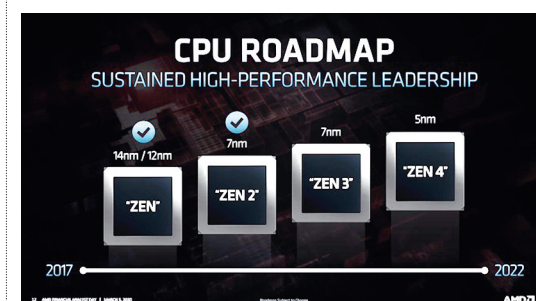
AMD stated that its CPU roadmaps for its enterprise portfolio are going to offer more vision into the future than its consumer side for a couple of reasons. First, the

enterprise market is built on a longer product cycle and it helps when planning these systems to know what is in the pipe publicly, but also from an investor standpoint where the enterprise market ultimately offers the bigger financial opportunity.

To that end, AMD confirmed what we essentially knew, with Zen 3 based Milan coming in 'late 2020'.

Zen 4 based Genoa has already been announced as the CPU to power the El Capitan supercomputer, and in this roadmap AMD has put it as coming out by 2022. We asked AMD for clarification, and they stated that in this sort of graph, we should interpret it as the full stack of Genoa should be formally launched by the end of 2022. Given AMD's recent 12-15 month cadence with the generations of EPYC, and the expected launch of Milan late this year, we would expect to see Genoa in early 2022.

Astute users might notice that Milan / Zen 3 has been listed as '7nm', where previously it was listed as '7nm+'. We've got a whole news post on why AMD has made this change, but the short of it is that AMD initially put '7nm+' to mean 'an advanced version of 7nm'. When TSMC named its EUV version of 7nm as N7+, people had assumed

they were the same, and AMD wanted to clarify that Milan is on a version of 7nm, and the exact version will be disclosed at a later date. In the future the company will avoid using '+' so this doesn't happen again (!). We also have Genoa listed as a 5nm product.
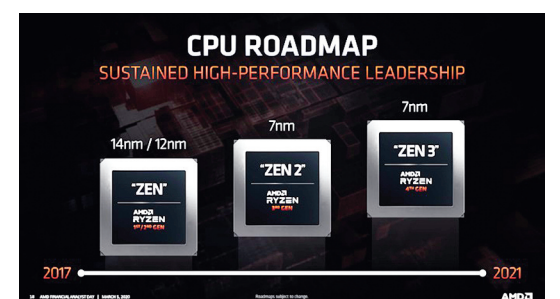
Harder numbers about Milan and Genoa are expected to be unveiled closer to their respective launch times.

On the consumer side, AMD said a little less, with its roadmap only going out to Zen 3, which has the codename 'Vermeer' for the desktop product.

In this graph, we see that the Zen 3 product here is on the far right, but so is the date – 2021. Does this mean Zen 3 for consumers is coming 2021? We asked AMD to clarify, and were told that we should interpret this as that the range of

Zen 3 consumer products, such as desktop CPUs, HEDT CPUs, mobile APUs, and consumer APUs, should all be available by the end of 2021. The company clarified that Zen 3 will hit the consumer market 'later this year', meaning late 2020.

So here comes a poignant question – what is going to come first in 2020? Zen 3 for enterprise is listed as 'late 2020', and Zen 3 for consumer is 'later this year'. AMD makes a lot more money on its enterprise products than its consumer products, and while it enjoys a healthy performance lead in both, it really wants to push its market share in enterprise a lot more to drive home the bigger financial potential. With this in mind, I highly suspect that given AMD's lead in the consumer market, we might see the company push more of its Zen 3 silicon into the enterprise market as a priority, with only a limited 2020 consumer release. I could be wrong, but we will find out closer to the time.

A triple folding phone!

When TCL's prototype for a crazy triple folding phone last October, it was in the preliminary stages. The concept was there, with the "DragonHinge" allowing it to bend in multiple directions, but a working screen was not. This week, the company is making some progress and now has a functioning device, but it is still very much a prototype.

When fully opened you have a 10-inch tablet with a large plastic display. You can also fold it so that only two screens are open, with the unused portion either tucked away or used to prop up the rest of the device.

You also can take it down to just one screen in a more traditional phone-like device. It's divided into three segments, each containing a 6.65-inch display and its own battery. As you can imagine, when you fold all three layers down, it's incredibly thick. Unsurprisingly, it feels as if you had three phones stacked on top of each other.

Running Android, the device adjusted to each screen opening and closing, but a lag was noticeable when switching modes, although that's to be expected of a concept device like this. It's clearly not yet ready to compete with the Samsung Galaxy Fold or Huawei Mate XS.

Stefan Streit, TCL's general manager of global marketing, said in an interview that the still-

unnamed device is one of three dozen prototypes that TCL is experimenting with as the company looks to enter the global phone market with its own brand. TCL is best known in the US for its excellent TVs. Other concepts include a clamshell device that the company demoed at CES in January and a

new slideable with a rollable AMOLED display that uses a motor to extend its 6.75-inch screen to one that is 7.8 inches. Streit says the company has been working with Google to optimize Android for its many foldables.

There's no timeline for when, or even if, you'll actually be able to buy any of these devices, through Streit says a foldable device of some kind from the company will arrive in the first half of 2021.

TCL announced at CES that it plans to launch a more traditional phone called the 10 Pro in the US this year.

-Cnet

SpaceX will send tourists to the ISS next year

SpaceX will send three tourists on a 10-day trip to the International Space Station sometime in late 2021. It'll use its Falcon 9 rocket and its new Crew Dragon spacecraft, the company announced on Thursday. This marks the second big space tourism announcement from the company this year, report from Verge.

The orbital vacation is part of a deal that SpaceX signed with Houston-based startup Axiom Space, which will manage the logistics of the trip for the three private citizens. While seven private citizens have spent time on the ISS (one of them even went twice), this mission will be the first fully private trip to the ISS.

The space tourists will spend two days traveling to and from the orbital space station and at least eight days on board, sharing space with the astronauts who work there. Tickets will cost around $55 million, and one seat is already booked, according to The New York Times. The trip was made possible after NASA announced last year that it would start opening up the ISS to more commercial activities like space tourism.

SpaceX has spent the last few years building a new version of its

Dragon spacecraft that's rated for human flight as part of a program to send NASA astronauts to the ISS. The private spaceflight company recently completed a second major flight test of this new version of Dragon where it demonstrated the

ability to escape an exploding rocket. The first flight with NASA astronauts is expected to take place later this year.

But SpaceX isn't just focused on being a taxi for astronauts. The company is increasingly embracing

space tourism as a potential revenue stream. Just last month, SpaceX announced that it is working with space tourism company Space Adventures to send up to four private citizens into orbit around the Earth sometime in late 2021 or

early 2022.

Off-world tourism, in general, is attracting a lot more interest and investment lately now that multiple private companies have demonstrated the ability to reach space. Richard Branson's Virgin Galactic

recently became the first publicly traded space tourism company, with plans to offer multiple people a few minutes of weightlessness in its massive spaceplane for a few hundred thousand dollars. Blue Origin, Jeff Bezos' spaceflight company, is promising a similarly brief experience to tourists who ride to space on its New Shepard rocket.

So far, what SpaceX is offering appears to be far more substantial than either of those options — hence the higher price tag. The company has even bigger plans, too, with a tourist trip around the Moon slated for sometime in the next few years as well as ambitions to send people to Mars.

As for Axiom, the startup says there could be more trips to the ISS after this one. "This history-making flight will represent a watershed moment in the march toward universal and routine access to space," Axiom CEO Michael Suffredini said in a statement. "This will be just the first of many missions to ISS to be completely crewed and managed by Axiom Space – a first for a commercial entity. Procuring the transportation marks significant progress toward that goal, and we're glad to be working with SpaceX in this effort."