

8 bits wisdom to secure the code of life

Keynote Bsides Munich
11.11.2024

Disclaimer

The views expressed here are the ones of the presenter and do not necessarily reflect the view of the employer

And

I am not a doctor and the information included in this presentation is no medical advice and should not be taken as such

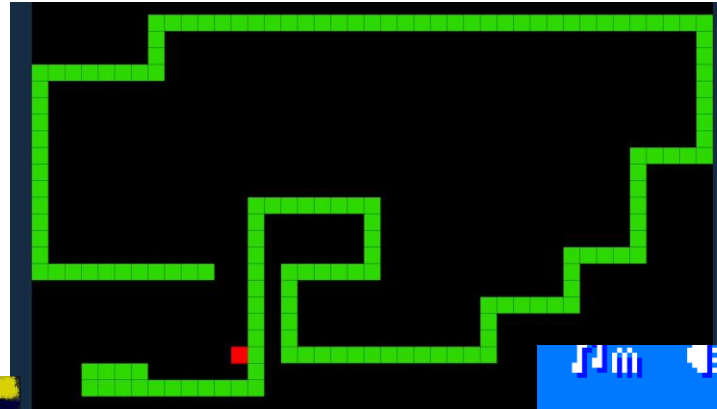
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Pictures and links in this presentation are not (always) a complete endorsement of the referenced authors

8 bit days – The fun parts 😊



[Pong]



[Snake]



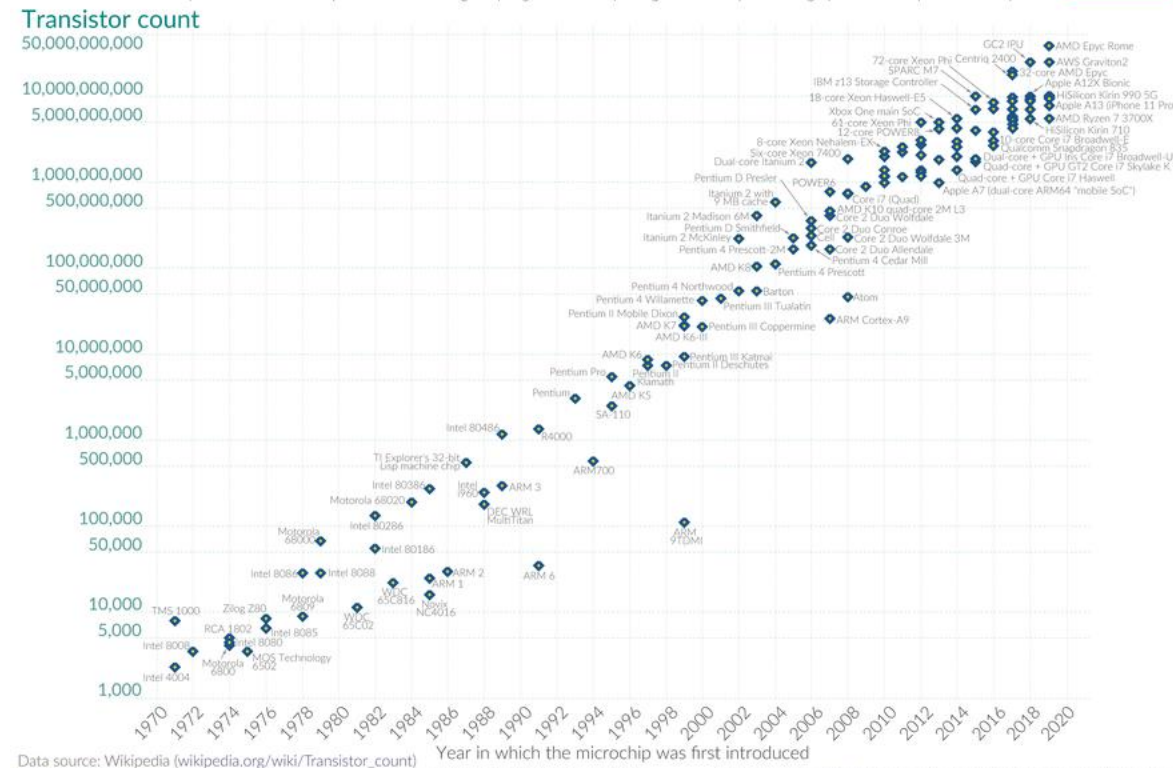
[Mini Push]

Moore`s Law

Moore's Law: The number of transistors on microchips doubles every two years

Moore's law describes the empirical regularity that the number of transistors on integrated circuits doubles approximately every two years. This advancement is important for other aspects of technological progress in computing – such as processing speed or the price of computers.

S Our World
in Data



Data source: Wikipedia (wikipedia.org/wiki/Transistor_count)

OurWorldinData.org - Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the authors Hannah Ritchie and Max Roser.

Source: https://en.wikipedia.org/wiki/Moore%27s_law

Vulnerability Development over time

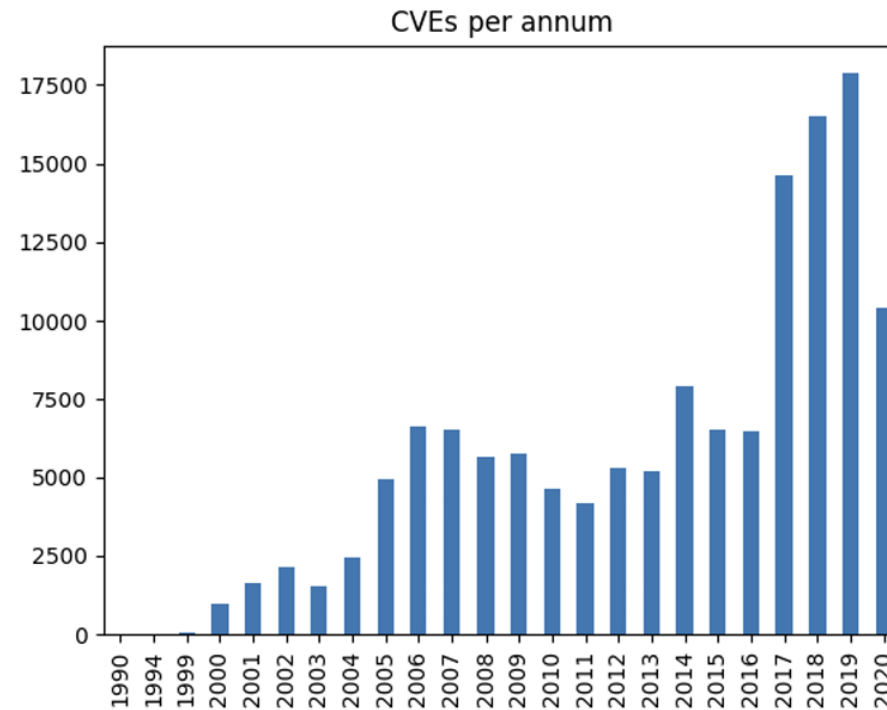


Fig. 3. Annual total CVEs published 2002 to 2020

Source Paper by Éireann Leverett, Matilda Rhode, and Adam Wedgbury:
https://www.researchgate.net/publication/346701622_Vulnerability_Forecasting_In_theory_and_practice

Ransomware evolution

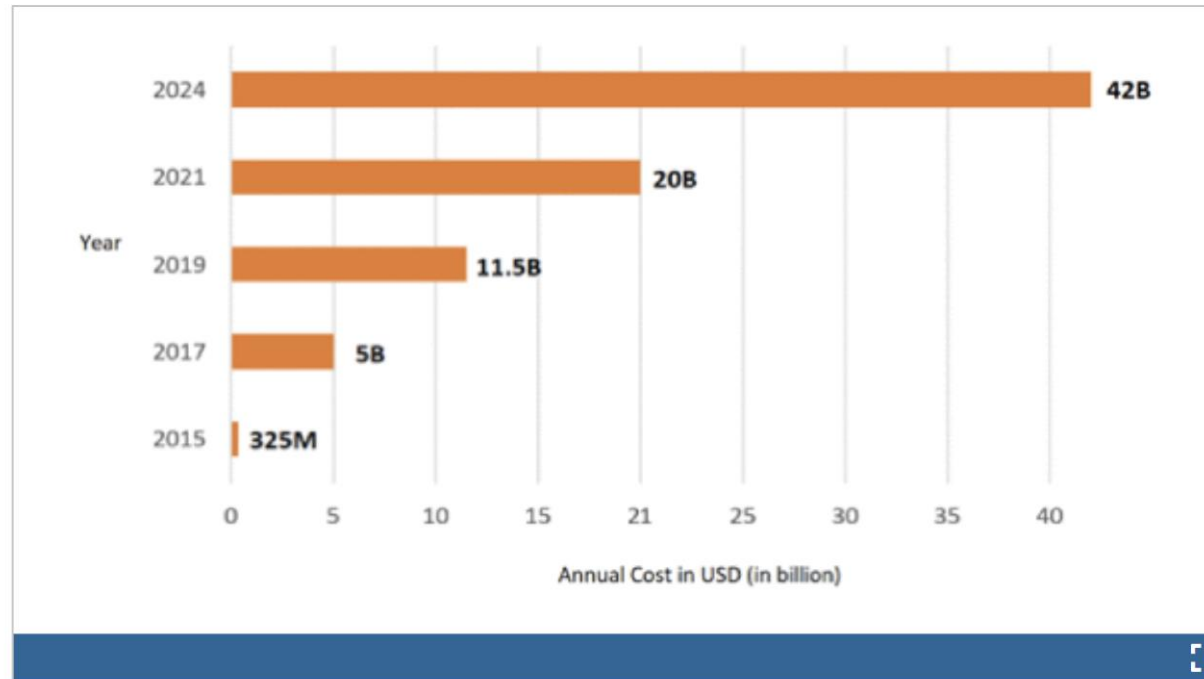


FIGURE 1.
Global Damage Caused by Ransomware Attacks.

Source: [The Age of Ransomware: A Survey on the Evolution, Taxonomy, and Research Directions | IEEE Journals & Magazine | IEEE Xplore](#)

The outcome



Source: <https://sosafe-awareness.com/blog/s>

**ARTICLES**





SOC Analyst Burnout The problem and the Solutions

[Source: SOC Analyst Burnout – The Problem and the Solutions, by Rob van Os - SECO-Institute](#)

FORBES > INNOVATION > CYBERSECURITY

ty Burnout g The Breaking

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Oct 15, 2024, 10:25am EDT

ty-burnout-crisis-is-reaching-the-breaking-point/

Gartner outcome for cybersecurity leaders

By Chalsley Taylor | 3-minute read | January 10, 2023

Long hours and excessive responsibilities are major contributors to burnout for cybersecurity leaders

- The pressure to work late nights or weekends was the cultural issue most commonly cited as fueling burnout among surveyed leaders, with 62% counting it among the biggest contributing factors to their burnout.

- In terms of organizational factors, having too many responsibilities was one of the biggest burnout drivers, as cited by 65% of cybersecurity leaders.

37% of cybersecurity leaders say unrealistic expectations of the security function and/or for someone in their role have significantly contributed to their burnout.

[Source: Gartner Peer Community, Burnout Among Cybersecurity Leaders: Causes and Resources Survey]

Majority of burned-out cybersecurity leaders did not disclose their experience to their manager

- Only 46% of cybersecurity leaders who experienced burnout told their manager about it.

- Among those who did not tell their managers, 31% said their decision was due to fear of negative repercussions.

- As for the leaders who did notify their managers, 27% indicated their superior did not then help them devise a remediation plan.

Cybersecurity leaders call for improvements in resources and support

- While 51% of respondents say there are adequate resources available to cope with or prevent burnout, 46% indicate that such resources are lacking or entirely absent at their organization.

- Surveyed cybersecurity leaders believe their organizations can reduce burnout risk for their role by increasing resource allocation, executive leadership support and recognition.

Cybersecurity leaders share their perspectives on burnout

- “There are so many threats, and pressure is building on cybersecurity leaders to have the solutions. In some cases, that expectation is unrealistic.” — Director, healthcare industry, 10,000+ employees

- “Managing the expectations of users while remaining compliant is exhausting and often goes unnoticed to a wider audience.” — VP, utilities industry, 1,000-5,000 employees

- “There is a tremendous amount of (constant) pressure on cybersecurity leaders. Blame/pointing fingers, in the case of a security event, is always on your mind ... Easing that fear is critical for an organization to reduce the level of burnout.” — Director, finance industry, 10,000+ employees

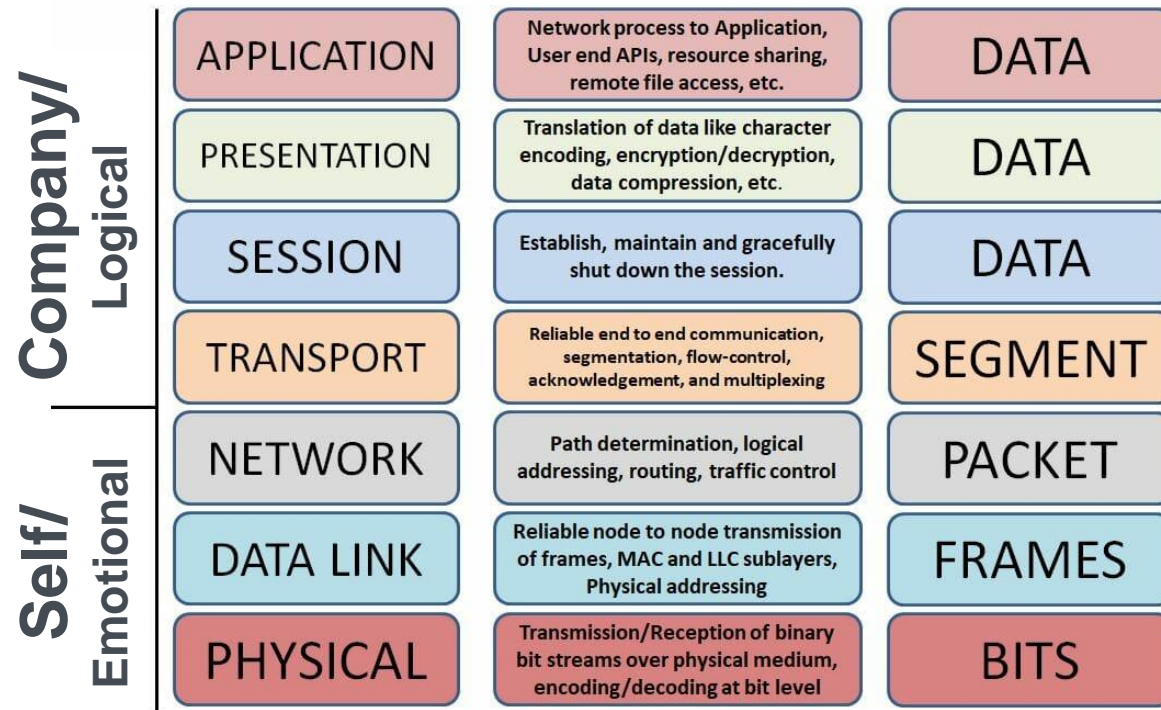
[Source Gartner Article: Cybersecurity Leader Burnout — Causes and Solutions](#)

So.. With 20 years of experience in the industry..

- **What would I do differently now?**
- **What knowledge did I wish, I had earlier?**
- **What can you do to avoid running into burnout?**

And: How do I coach my people at work?

A reference from the 8 bit days – The ISO OSI Model



Orientation

Expectation at your current task

Expectation for role you have

Understand intentions of people around you

Understand how you can reach your goal

Understand your own needs & priorities

Understand what can destabilize you

Create stability / safety

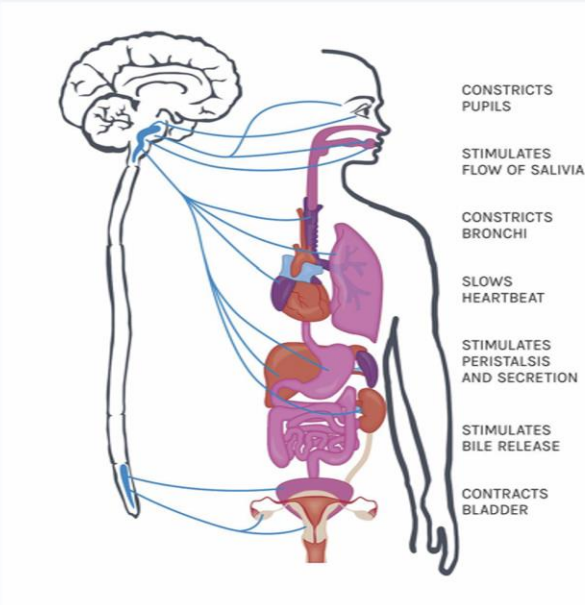
Source Picture: <https://networkhope.in/iso-osi-basic-reference-model/>

Physical Layer: Bits (1)

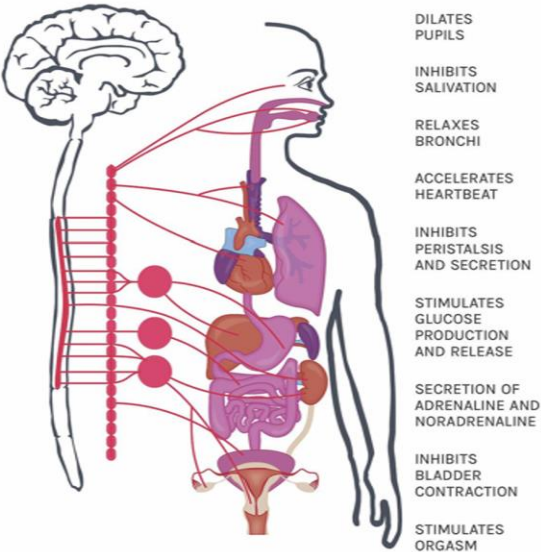
Learn to understand your autonomic nervous system

Host Layers	APPLICATION	Network process to Application, User end APIs, resource sharing, remote file access, etc.	DATA
	PRESENTATION	Translation of data like character encoding, encryption/decryption, data compression, etc.	DATA
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Media Layers			

Parasympathetic Nervous System (PNS)



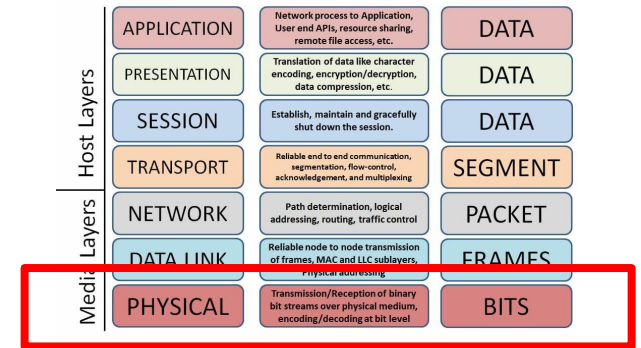
Sympathetic Nervous System (SNS)



Picture Source: Irene Lyon – 21daytuneup

Physical Layer: Bits (2)

Learn to understand your autonomic nervous system



Have a tendency to fight?

THIS OFTEN SHOWS UP AS:

- Having a quick flash of anger or frustration that is disproportionate to the situation.
- Getting defensive and trying to prove your case (Even if you know you're wrong, you hold your ground anyway and find it hard to admit fault).
- Raising your voice and/or displaying aggressive (or rage-like) tendencies.
- Possibly getting scary to the people you love.



Have a tendency to flee?

THIS MIGHT SHOW UP AS:

- Ignoring a situation or pretending it didn't happen.
- Feeling like you really want to get away, like if you just get a fresh start then things will change, which may show up as thinking about moving (or actually moving) away from situations, cities, jobs, relationships, etc.
- Leaving the room or conversation and doing your best to avoid any and all confrontation.
- Getting busy and preoccupied with something that's completely the opposite of the situation at hand - you start cleaning, or knitting, etc in the hope that it will just go away on its own.



Have a tendency to freeze?

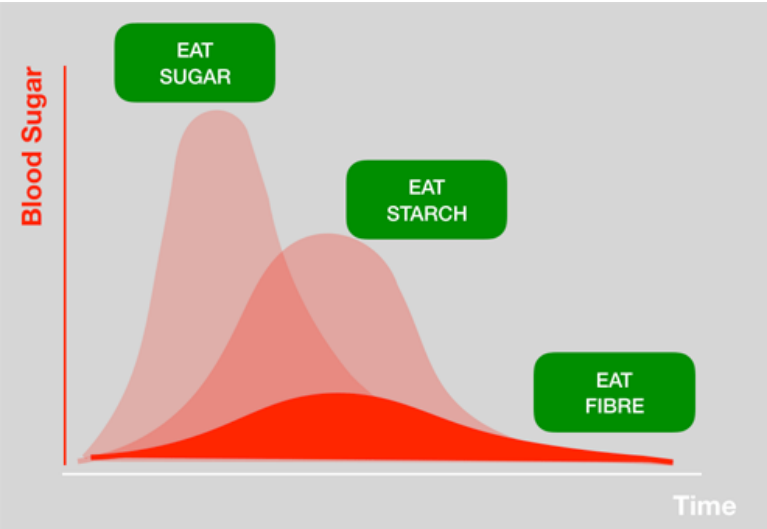
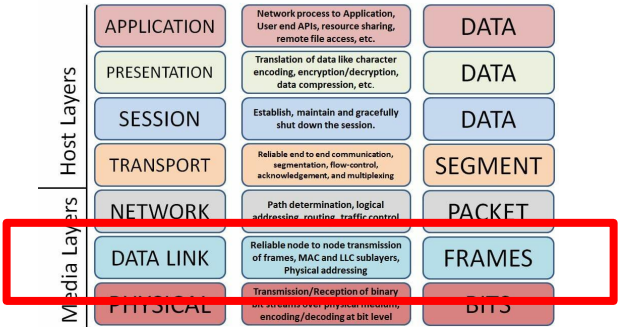
THIS MIGHT LOOK LIKE:

- Going completely blank and finding it hard to express ANYTHING.
- Having little or no desire or ability to go out or make any kind of social engagement.
- Hoping that if you get really quiet and still and don't make a peep the issue will just go away on its own (No one will know, right?).
- Completely forget a stressful (or traumatic) situation even happened... when someone asks you about it you might say "what are you talking about?" (And you really do have NO recollection of the incident).
- Having time pass without much awareness, be it for minutes, hours, days or years.

Source: Irene Lyon – your-survival-style-worksheet.pdf

Data Link Layer: Frames

Understand the data you take in: foods!



Signs & Symptoms

Insulin Resistance

Weight gain

Fatigue

Sugar cravings

Skin tags

Acanthosis Nigricans

Mood disorders

Trouble losing weight

Hormonal imbalances

Hairloss (Androgenic alopecia)

Frequent hunger & thirst

@nextdoornutritionist

ADRENAL FATIGUE

SYMPTOMS

- Craving for fat, salty and sugary food
- Nonspecific digestive problems, dyspepsia
- Dizziness, weakness
- Suppressed immune system
- Pain in the neck or back
- Less accurate memory
- Tiredness, ongoing fatigue
- Depression, irritability
- Tendency to gain weight
- Low sex drive

TREATMENT

- Vitamin D, B, C supplements, selenium, magnesium, zinc, Omega-3 fatty acids, curcumin
- Improve sleep habits. Spend more time outdoors being physically active. Yoga practice, stress management
- Avoid sugar, caffeine and junk food
- Eat healthy (leafy greens, healthy fats like coconut and olive oil, wild-caught fish, avocado)

Consult with an endocrinologist if you experience these symptoms. Manage your stress and stay active.

Picture Source: <https://wellness-studio.co.uk/stress-and-adrenal-fatigue/>, <https://www.instagram.com/nextdoornutritionist/p/C24XftXx0LK/>, <https://www.cuttingcarbs.co.uk/insulin-and-insulin-resistance/>

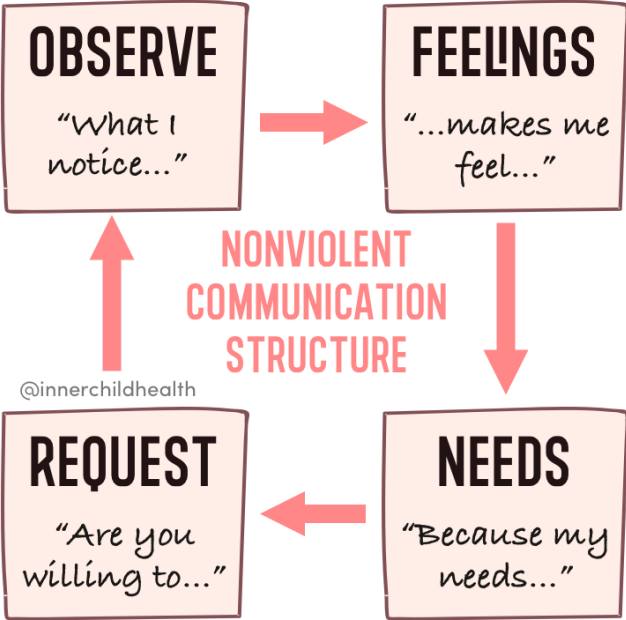
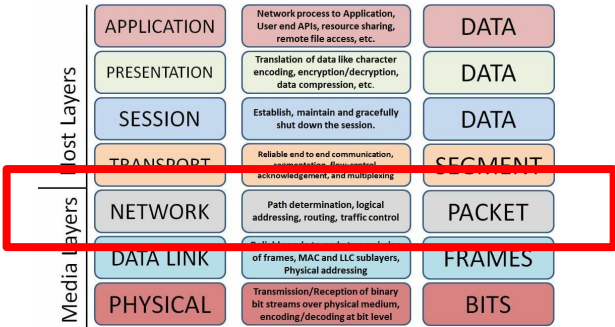
Network Layer: Packet

Learn to understand your own needs and priorities

Learn about non violent communication (Marshall B. Rosenberg)

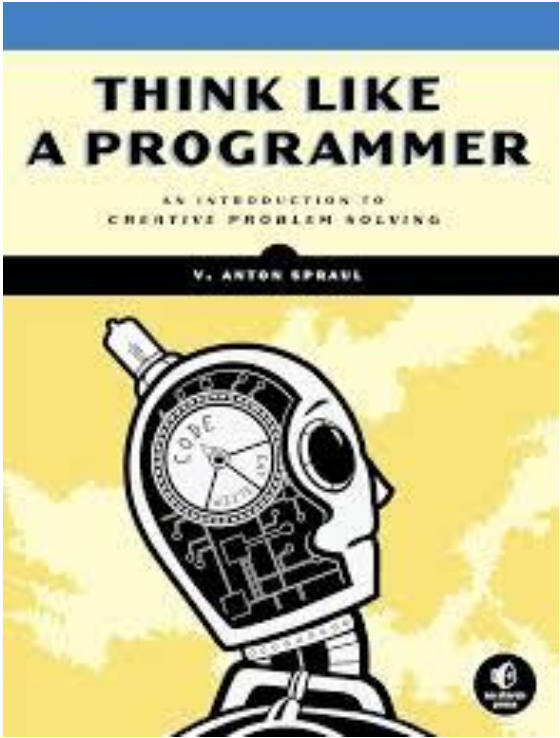
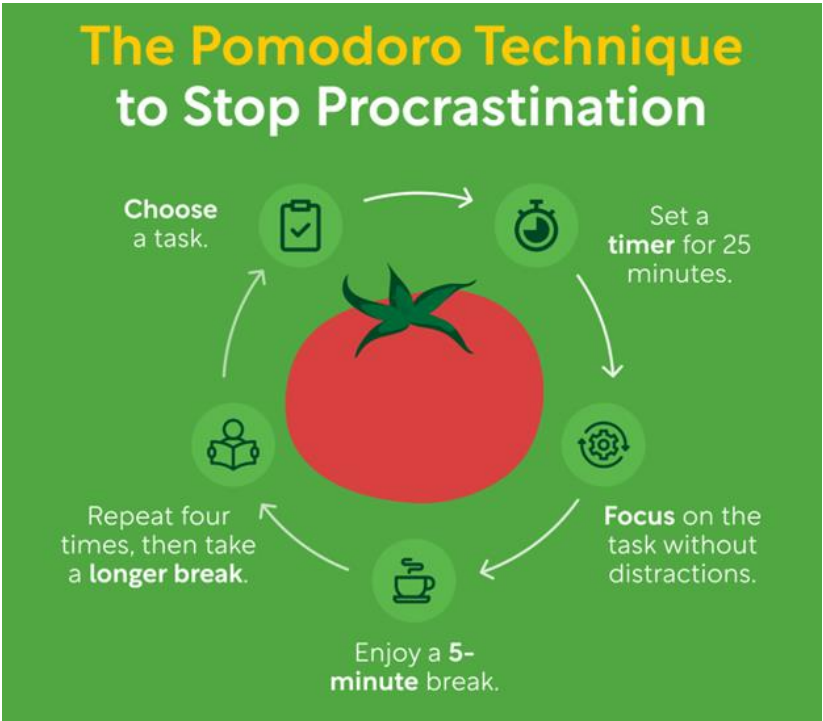
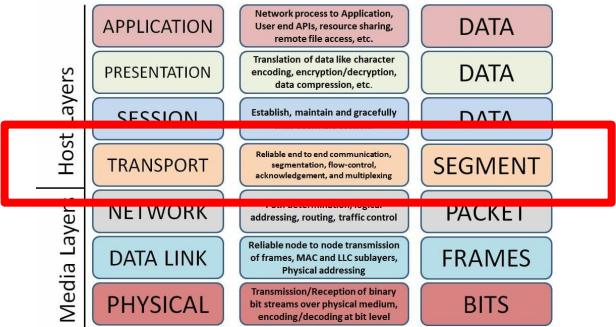


Picture Source: <https://management30.com/practice/moving-motivators/>, <https://id.pinterest.com/pin/377598750020441205/>



Transport Layer: Segment

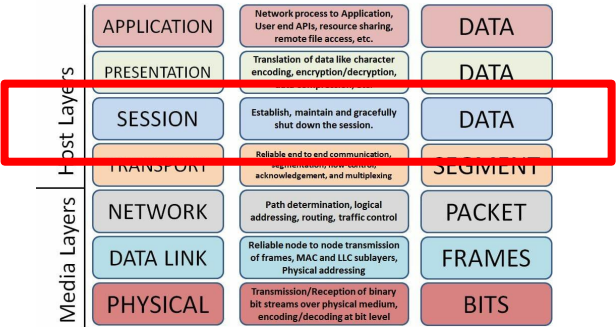
Learn to tackle big problems



Picture Source: <https://www.amazon.com/Think-Like-Programmer-Introduction-Creative/dp/1593274246>, <https://bharatividyaapeethonline.com/what-is-the-pomodoro-technique/>

Session Layer: Data (1)

Understand intentions and personalities of people around you



projektron

Picture Source: Harvard Method - <https://www.projektron.de/en/blog/details/harvard-method-3654/>

Session Layer: Data (2)

Understand intentions and personalities of people around you

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Analysts



ARCHITECT
INTJ (-A/-T)



LOGICIAN
INTP (-A/-T)



COMMANDER
ENTJ (-A/-T)



DEBATER
ENTP (-A/-T)



ADVOCATE
INFJ (-A/-T)



MEDIATOR
INFP (-A/-T)



PROTAGONIST
ENFJ (-A/-T)



CAMPAIGNER
ENFP (-A/-T)

Diplomats



LOGISTICIAN
ISTJ (-A/-T)



DEFENDER
ISFJ (-A/-T)



EXECUTIVE
ESTJ (-A/-T)



CONSUL
ESFJ (-A/-T)



VIRTUOSO
ISTP (-A/-T)



ADVENTURER
ISFP (-A/-T)



ENTREPRENEUR
ESTP (-A/-T)



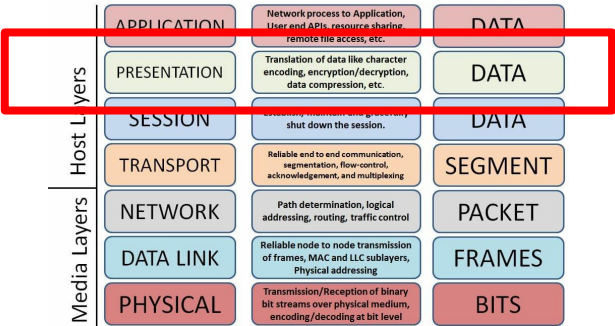
ENTERTAINER
ESFP (-A/-T)

Explorers

Picture Source: <https://www.16personalities.com>

Presentation Layer: Data

Understand expectations for your role

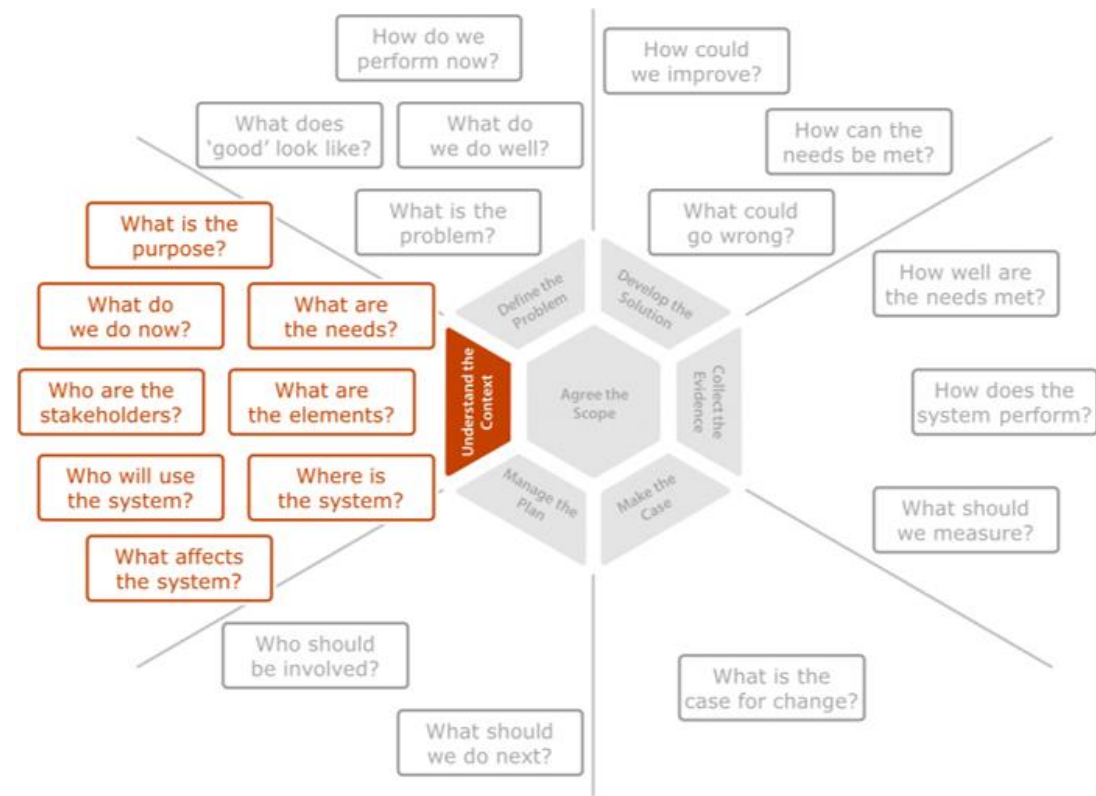


Understanding your manager	Understanding yourself	Building a relationship
<ul style="list-style-type: none"> Do you understand your manager’s goals? What were they hired to do? Do they like written communication or verbal communication? What drives them? Data? Effort? Outcome? When you present them with ideas, do they like the options they want to pick from, or do they want a recommendation? What are their blind spots? What topics energize them? 	<ul style="list-style-type: none"> How do you see authority figures? Managers? Coaches? Partners? Evaluators? What is your working style? What are your strengths and weaknesses? How do you communicate? Do you understand your role expectations? Do you understand why you are in the role and what your goals are? 	<ul style="list-style-type: none"> How would you define your current relationship? Are you meeting expectations? How do you know? Are you clear about what you need and expect? Are you sure that they know? Do they trust you? How did you go about gaining their trust? Are you delivering on-time quality work? Do you keep them informed? Are you considerate of their time? Are you accommodating their preferences?

Source: <https://newsletter.abhishukla.com/p/managing-up-without-sucking-up>

Application Layer: Data

Understand context of your current task



Picture Source: <https://www.iitoolkit.com/process/context.html>

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“

**“The important thing is
not to stop questioning.”**

Albert Einstein

Désirée Sacher-Boldewin

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