

Introduction to ICT (IC101)

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■ Instructors Team [RECAP]



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Imagination,
Creative
thinking,
Ideation

Sensors,
Embedded
systems

Data,
Computing

All go into the roll out of a final product!

Packaging
Ergonomics

Usability,
User Experience

Value for
Money

■ Velcro? [RECAP]

- ▣ Can somebody tell me what is 'Velcro'?

■ Velcro?

- It is a “hook-and-loop” fastener invented in 1941, a combination of the French words “velours” (meaning velvet) and “crochet” (hook).
- It was formally patented in 1955.
- US Army formally denounced the use of velcro from from military uniforms in Aug 2010.

■ Velcro?

- ▣ Who invented it?

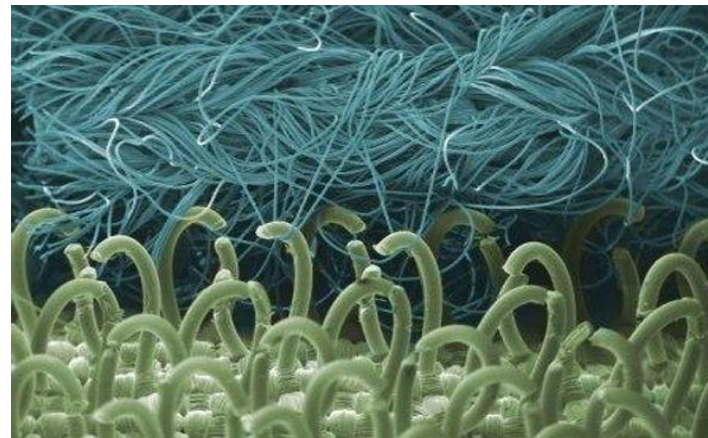
■ Velcro?

- ▣ A brainchild of George de Mestral (June 19, 1907 – February 8, 1990), a Swiss electrical engineer, who went for a walk in the woods and wondered if the burrs that clung to his trousers — and dog — could be turned into something useful.

■ Velcro?



- One of the original pioneers of the **biomimicry** field



*Images taken from www.biomimicry.com
Subject to copyright.*

■ Velcro?

- Examined the burrs under a microscope and decided to devise a unique fastener that imitated the burrs' microscopic hooks.
- He realized that nylon when sewn under infrared light formed tiny but tough hooks, which easily attached themselves to softer, velvety nylon fabric.
- So the hook (from the burr) and the loops (from the fur/fabric) set in motion an idea.

■ Sumit Dagar?

- Sumit Dagar, DA-IICT alumnus (200401137 BTech, a TED Fellow)



■ Sumit Dagar?

□ Can somebody tell me what is TED?

■ Sumit Dagar?

▣ TED (technology, entertainment, design)

■ Sumit Dagar?

- Sumit Dagar - Touch screen phone for the visually impaired
(<https://www.youtube.com/watch?v=F2ZQU07UJXA>)
- What is a Design : Sumit Dagar at TEDxRVVidyaniketan
(<https://www.youtube.com/watch?v=8ReahSISWAw>)
- Sumit Dagar AVP 1MG shares his insight!
(<https://www.youtube.com/watch?v=S6RfmsvyVDA>)
- Designing user-friendly technology
(<https://www.youtube.com/watch?v=HEgGEkwTzfE>)

■ Pranav Mistry?

- Pranav Mistry, President and CEO of STAR Labs
- As an MIT grad student, Pranav Mistry invented **SixthSense**, a wearable device that enables new interactions between the real world and the world of data.
- Bachelors degree in Computer Science and Engineering from Gujarat University.



■ Pranav Mistry?

- TED talk by Pranav Mistry (2009)
- The thrilling experience of SixthSense technology (https://www.ted.com/talks/pranav_mistry_the_thrilling_potential_of_sixthsense_technology?language=en)

■ You can be an inventor, too ...

- ▣ We keep discussing about similar product ideas, inventions and projects during this semester which might excite you to keep observing about whatever has been happening around you and how you can think of designing some solutions for them.

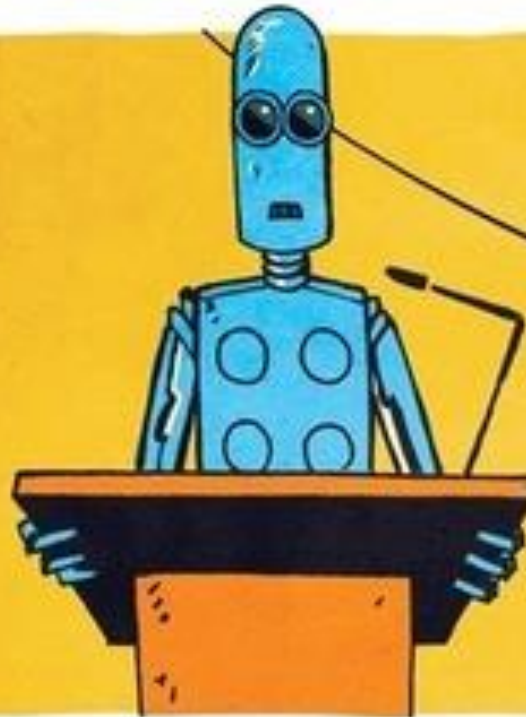
Zen Pencil—I am graduating



I AM GRADUATING



I SHOULD LOOK AT THIS
AS A POSITIVE EXPERIENCE,
ESPECIALLY BEING AT THE
TOP OF MY CLASS.



YOUR 2025
VALEDICTORIAN

HOWEVER, IN RETROSPECT, I CANNOT SAY THAT I AM ANY MORE INTELLIGENT THAN MY PEERS. I CAN ATTEST THAT I AM ONLY THE BEST AT DOING WHAT I AM TOLD AND WORKING THE SYSTEM.



YET, HERE I STAND, AND I AM SUPPOSED TO BE PROUD THAT I HAVE COMPLETED THIS PERIOD OF INDOCTRINATION.



I WILL LEAVE IN THE FALL TO GO ON TO THE NEXT PHASE EXPECTED OF ME, IN ORDER TO RECEIVE A PAPER DOCUMENT THAT CERTIFIES THAT I AM CAPABLE OF WORK.



BUT I CONTEST THAT I AM A HUMAN BEING, A THINKER, AN ADVENTURER - NOT A WORKER.



Each of you is

- a human being,
- a thinker,
- a creator,
- an explorer,
- an adventurer

– not just

- a worker, or
- a follower

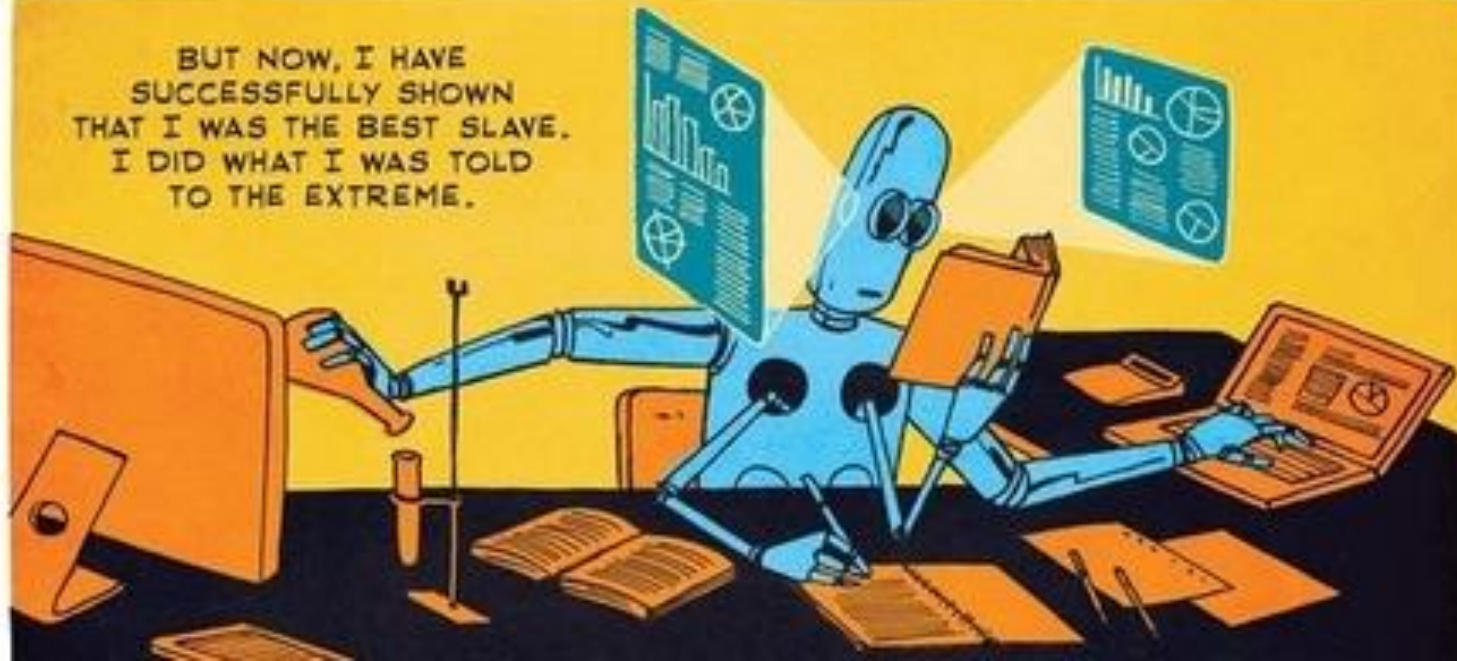
A WORKER IS SOMEONE WHO IS TRAPPED WITHIN REPETITION.
A SLAVE OF THE SYSTEM SET UP BEFORE HIM.



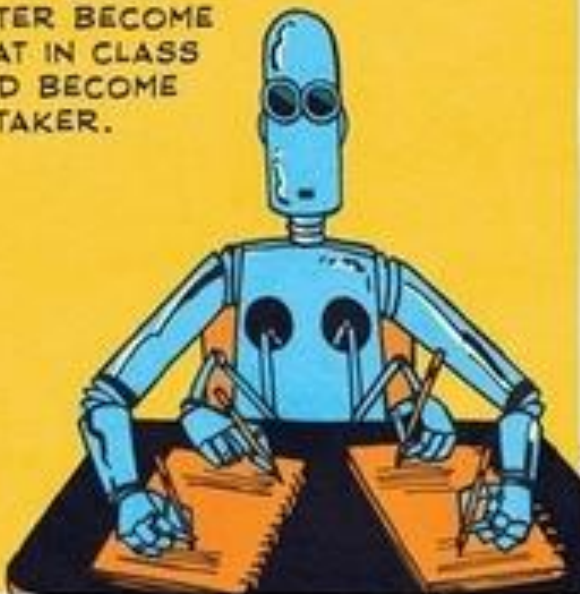
Don't become
a **slave** who
does what is
told or
instructed.

Educational
campuses are
not seen as a
factory which
produce
zombies or
ginies.

BUT NOW, I HAVE
SUCCESSFULLY SHOWN
THAT I WAS THE BEST SLAVE.
I DID WHAT I WAS TOLD
TO THE EXTREME.



WHILE OTHERS SAT IN CLASS
AND DOODLED TO LATER BECOME
GREAT ARTISTS, I SAT IN CLASS
TO TAKE NOTES AND BECOME
A GREAT TEST-TAKER.

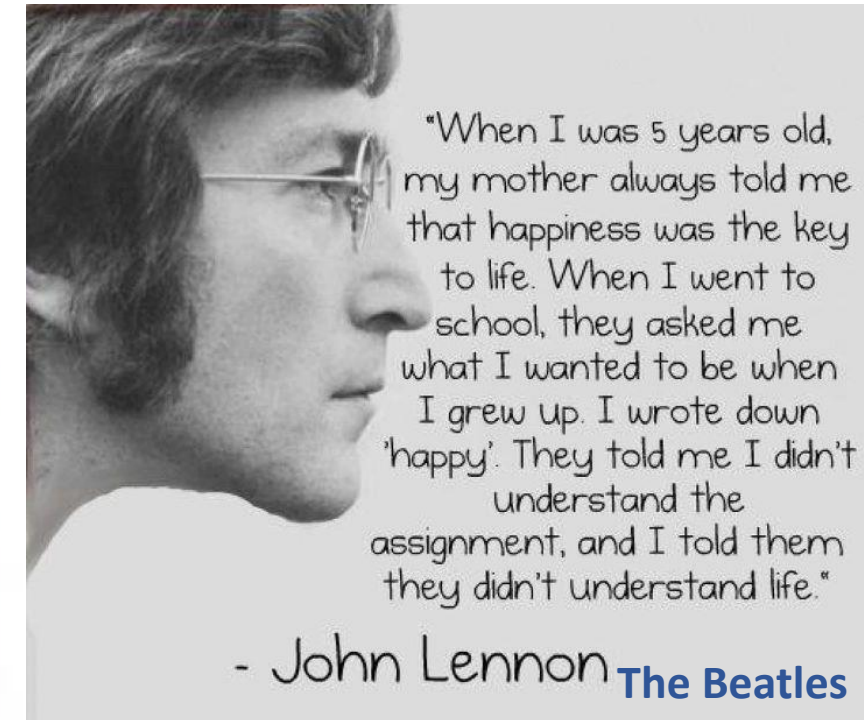
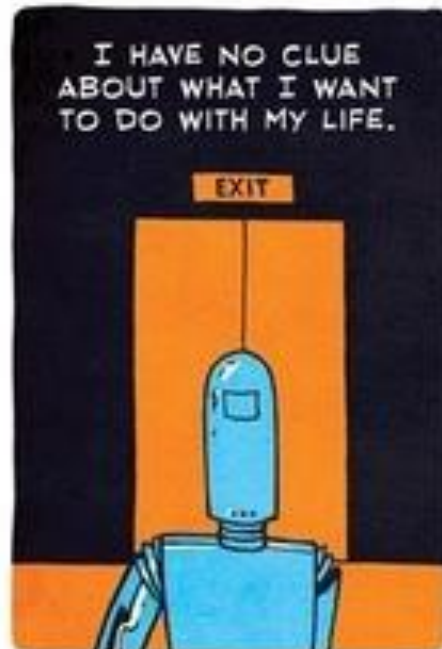
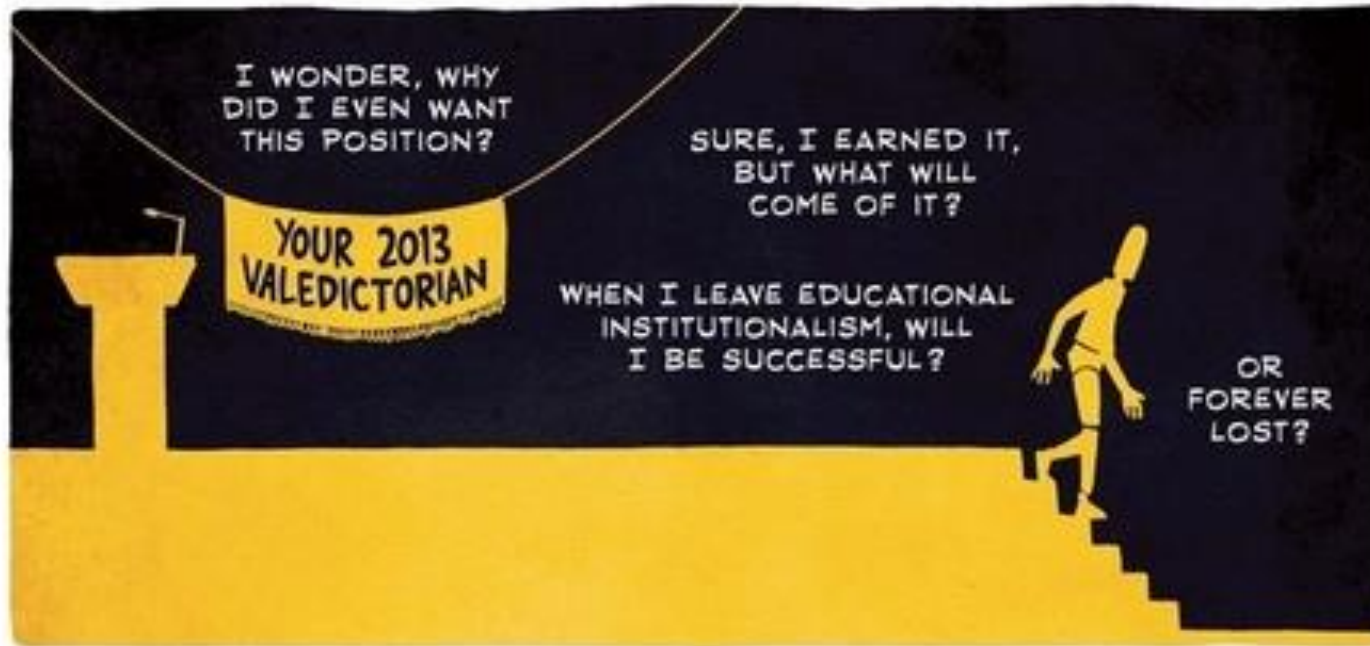


WHILE OTHERS
WOULD COME TO
CLASS WITHOUT THEIR
HOMEWORK DONE
BECAUSE THEY WERE
READING ABOUT AN
INTEREST OF THEIRS,
I NEVER MISSED
AN ASSIGNMENT.



WHILE OTHERS WERE CREATING
MUSIC AND WRITING LYRICS,
I DECIDED TO DO EXTRA CREDIT,
EVEN THOUGH I NEVER NEEDED IT.





Always ask yourself – “**what I want to be when I grew up?**” – A robot or a happy person?



*WORDS © ERICA GOLDSON, ARTWORK © GUYEN KUNG THAM 2012

zenpencils.com

- Let's listen to this soundtrack

