



JOHN VON NEUMANN
(1903 - 1957)



EARLY LIFE AND EDUCATION

Was born in Budapest in Neumann János Lajos and was the eldest of three brothers.

CHILD PRODIGY

By the age of 6 years old, he could divide two 8-digit numbers in his head and could converse in ancient greek.

Had photographic memory, being able to memorize and recite back a page out of a phone book in a few minutes.

At the age of 15, he began to study advanced calculus.

UNIVERSITY STUDIES

Graduated as a chemical engineer from ETH Zurich in 1926 (although he was never very attached to that subject), and passed his final examinations for his Ph.D. in mathematics simultaneously.

Was the youngest person ever lecturing at the University of Berlin in 1928.

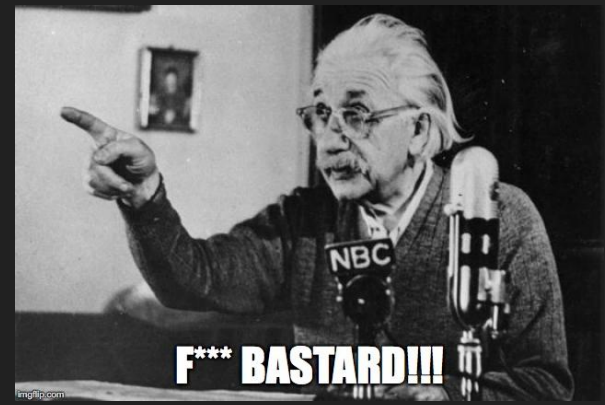
INTERESTS...

He had a active social life.
Loved to eat and drink good wine.

He used to play extremely loud german music on his gramophone,
which distracted those in neighboring offices, including Albert Einstein.

Despite being a notoriously bad driver, he enjoyed driving,
frequently while reading a book, which resulted in
numerous arrests, as well as accidents.

Never lost a good gossip.



OK OK! TIME TO BE SERIOUS!!...

Knowledge fields:

Mathematics.

Physicist.

Computer scientist.

Polymath.

Contributions:

Von Neumann Architecture in computing.

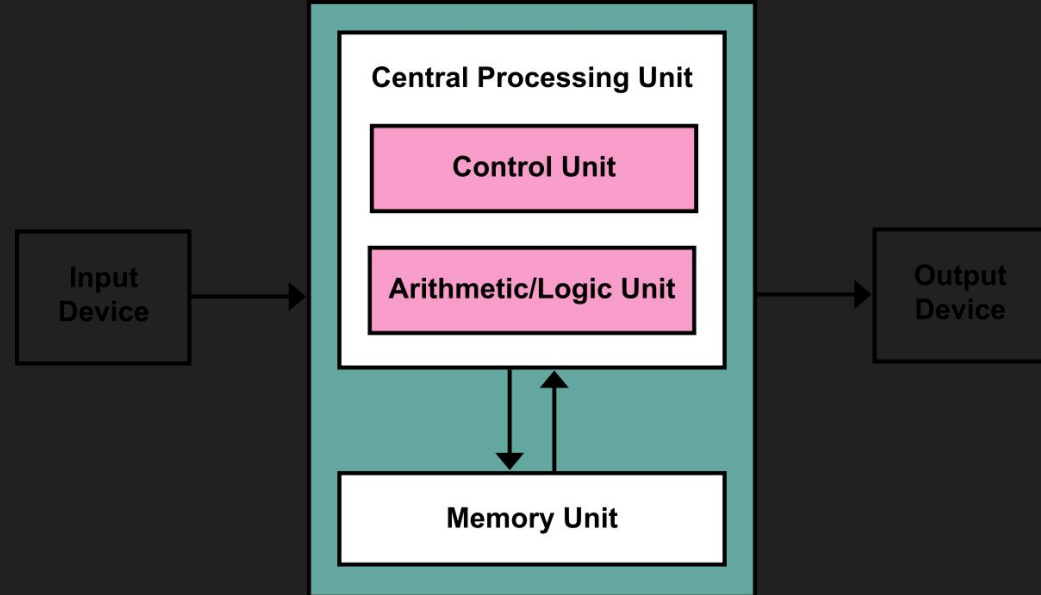
Game theory in economic field.

Pioneer in the application of **Operator Theory** to quantum mechanics.



LET'S TALK ABOUT....

VON NEUMANN ARCHITECTURE?!



BREAKING DOWN 'GAME THEORY'

The inspiration for Game Theory was POKER.

Why??

Von Neumann played occasionally and not terribly well.

He realized that poker was not guided by probability theory alone, and wanted to formulate the idea of "bluffing," a strategy that is meant to trick other players and hide information from them.

APPLICATIONS in psychology, biology, war, politics, economics and business.

KEY FIGURE IN..

Digital computer.

Cellular automata.

During the second world war he was involved in the development of the nuclear weapons.

YOU, YOU'RE BLUFFING



YES YOU ARE

WORK HARD PLAY HARD!!!

He published over 150 papers in his life..

60 in pure mathematics.

20 in physics.

60 in applied mathematics.

Last work..

Unfinished manuscript written while in hospital, published in book in 1958, and named *The Computer and the Brain*. (This book discusses basically, how the brain can be viewed as a computing machine!!)

SOURCES:

https://pt.wikipedia.org/wiki/John_von_Neumann

<https://cs.stanford.edu/people/eroberts/courses/soco/projects/1998-99/game-theory/neumann.html>