COMPUTER SCIENCE

ITS HISTORY AND NOTABLE PEOPLE
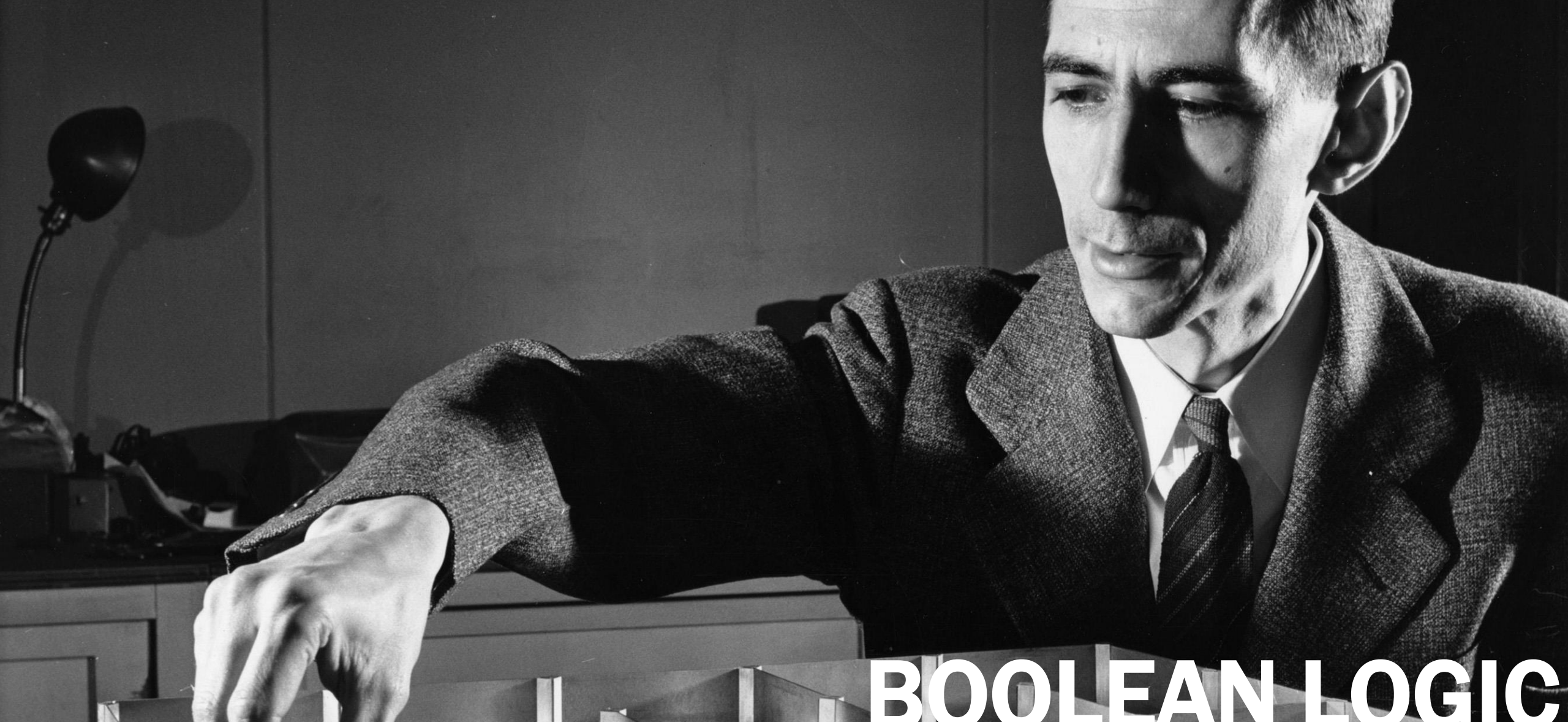
BOOLEAN LOGIC

- George Boole described an algebraic system of logic in 1847, now known as Boolean algebra
- Boolean algebra converts logic's verbal statements into a mathematical form
- Digital computers and electronic circuits are designed to implement binary arithmetic

ADA LOVELACE & CHARLES BABBAGE

- Ada designed the first computer algorithm (Bernoulli numbers)
- Worked together on Babbage's Analytical Engine
- Babbage's machines are the first mechanical computers

ALAN TURING

- Widely considered to be the father of theoretical computer science and AI
- Developed an electromechanical machine that helped break the Enigma code
- Invented Turing Machine: a model of a general purpose computer and Turing Test
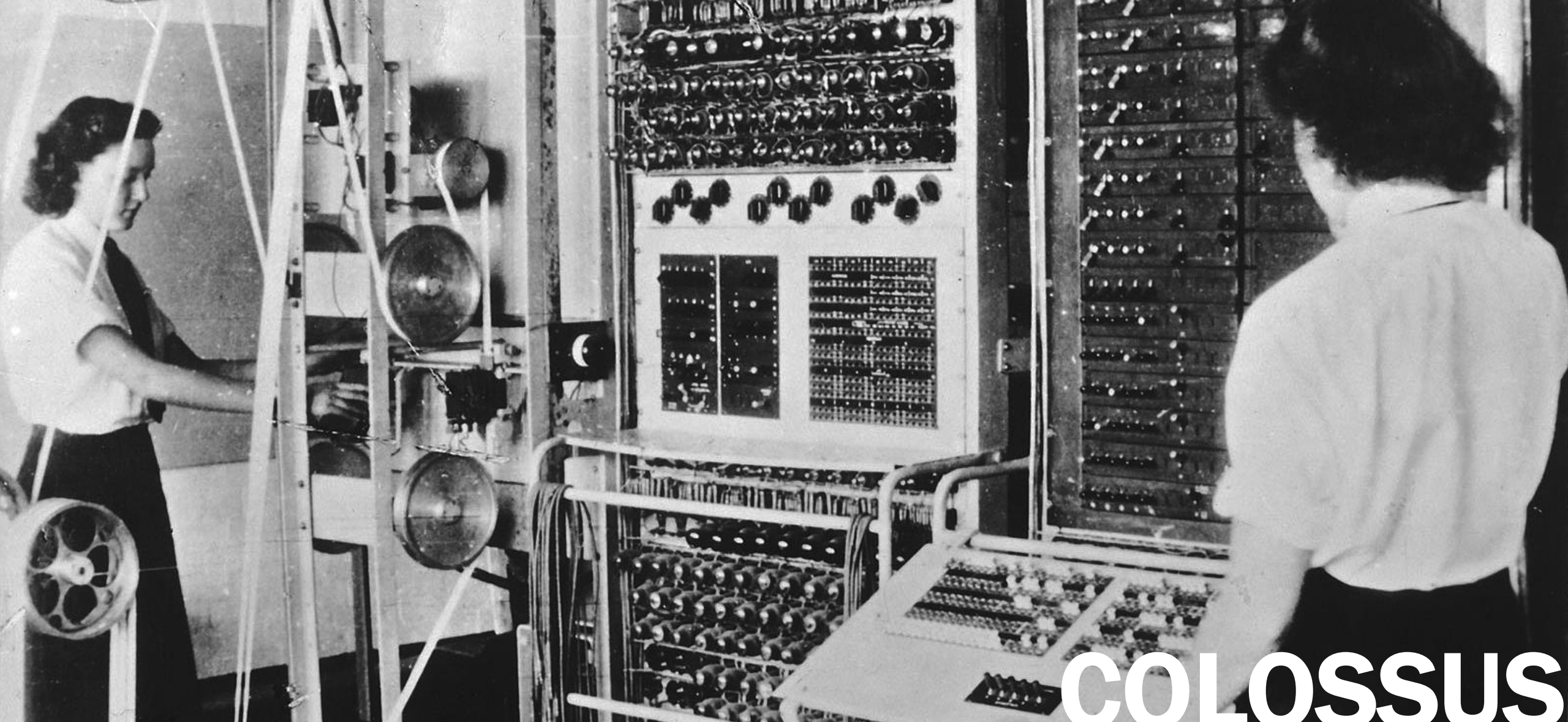
COLOSSUS

- Designed by Tommy Flowers, Allen Coombs and Sydney Broadhurst
- World's first electronic, digital, programmable computer
- Was highly classified and could not be included in the history of computing hardware for many years

UNIX

- Developed by Ken Thompson, Dennis Ritchie and others at Bell Labs in 1973
- One of the most influential operating systems ever invented
- Had a drastically simplified file model compared to many contemporary operating systems

THE INTERNET & WWW

- ~3,179,035,200 users worldwide, nearly 40% of the world's population (August 07, 2015)
- The Internet was developed in the by DARPA in October, 1969
- The World Wide Web was created at CERN 1989 by Tim Berners-Lee

GRACE HOPPER

- American computer scientist and United States Navy Rear Admiral
- Invented the first compiler for a computer programming language
- Has dozens of various places, objects and organizations named after her

MARGARET HAMILTON

- Director of the Software Engineering Division of the MIT Instrumentation Laboratory
- Lead software engineer for Apollo Guidance Computer
- Was given NASA Exceptional Space Act Award for scientific and technical contributions
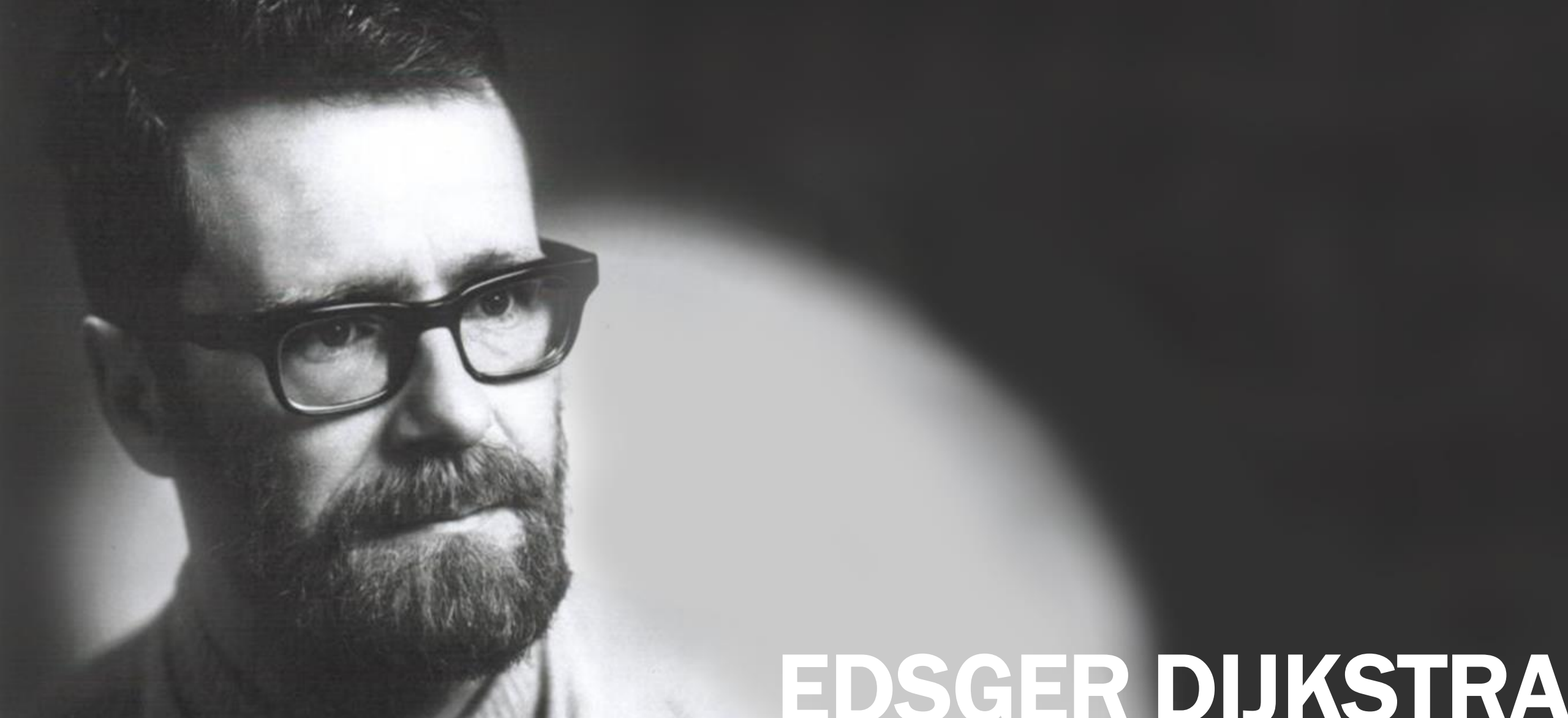
EDSGER DIJKSTRA

- One of the most influential members of computing science's founding generation
- Received the 1972 Turing Award for fundamental contributions to developing programming languages
- Authored more than 1,300 papers