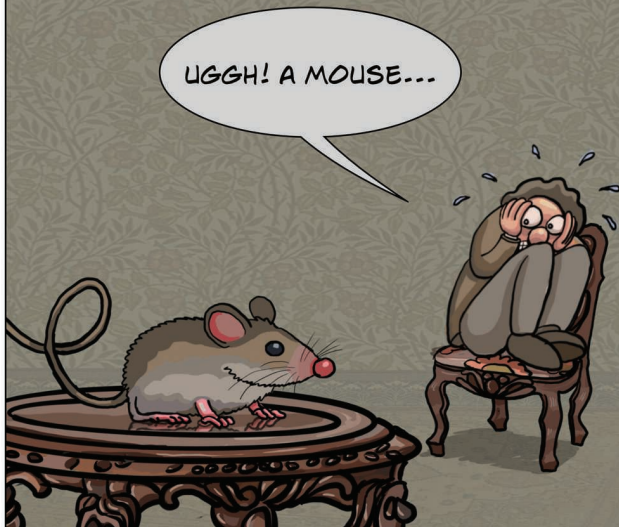


COMPUTING THROUGH TIME

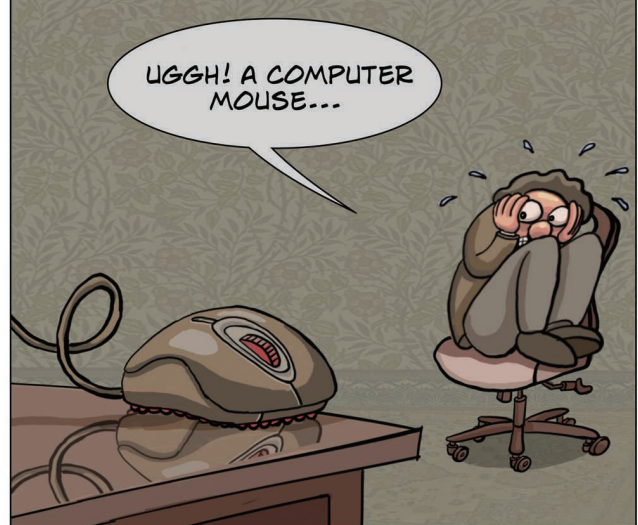
ERGUN AKLEMAN



MUSOPHOBIA BEFORE COMPUTERS



CYBERMUSOPHOBIA AFTER DIGITAL



MUSOPHOBIA IS THE FEAR OF MICE AND RATS. IT IS A VERY COMMON PHOBIA. THE TERM COMES FROM THE GREEK WORD REFERRING TO "MOUSE." FEAR OF COMPUTERS IS CALLED CYBERPHOBIA. A FEAR OF A COMPUTER MOUSE COULD, THEREFORE, BE CALLED CYBERMUSOPHOBIA. DOUGLAS ENGELBART, FROM THE STANFORD RESEARCH INSTITUTE, HAS USUALLY BEEN CREDITED AS THE INVENTOR OF THE COMPUTER MOUSE. IN 1963, AFTER GOING TO A COMPUTER GRAPHICS CONFERENCE, HE TOOK NOTES IMAGINING AN INPUT DEVICE HE INITIALLY CALLED A "BUG." BASED ON THIS INITIAL IDEA, ENGELBART AND BILL ENGLISH BUILT THE FIRST DEVICE THAT WAS CHRISTENED AS THE "MOUSE" SINCE THE CORD ATTACHED TO THE REAR PART OF THE DEVICE LOOKED LIKE THE TAIL OF A MOUSE.

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provide insight, knowledge, and skills independent of specific computers and programming languages. Moreover, since high school is the only time many students are exposed to CS, a good curriculum must also aim at breadth and versatility. This article describes such a curriculum. Its emphasis is on the basics of algorithmics, and it teaches programming as a way to get a computer to execute an algorithm. It has been proposed by a committee formed in 1990 by the Israel Ministry of Education." (p. 77) "Getting the Program Under Way; Successful program implementation involves two steps; developing the material and teaching it correctly. ... In fact, the teacher issue is one of the main difficulties in implementing the program. The anomaly is that most CS teachers do not have a university degree in computer science. This is unacceptable, and one of the committee's decisions has been to require such a degree from any teacher seeking a permit to teach CS in high school. ... Other difficulties besides the teacher problem have surfaced in this initial implementation. One is the incredibly diverse student backgrounds. On the one hand, the program must cater to students with no familiarity with computers (except possibly computer games). On

the other hand, many students have extensive programming experience." [Editor's note: Remember this article was written in 1995, but actually, even in highly developed countries, a computer science curriculum at the high school level is still a big problem, including the issues of whether all students should have access to the curriculum, like mathematics, and a lack of computer science-trained educators].

Internet Security Enters the Middle Ages; Rolf Oppliger (p. 100): "Because the Internet is dynamic, it has already changed significantly. The initial, research-oriented Internet and its protocol suite were designed for a benign environment best described as collegial, where users and hosts were mutually trusting and interested in a free, open exchange of information. These days, the Internet environment is less collegial and trustworthy; it encompasses all the risks, dangerous situations, and human vices found in society as a whole. ... The Internet community is investigating firewalls, one-time password systems, network-layer security protocols, secure message-handling systems, and authentication and key distribution systems. ... Today,