## Homage to Seymour Cray: Architect and Builder of Supercomputers. Michael L. Klein<sup>1</sup>

<sup>1</sup>College of Science & Technology, Temple University, Philadelphia PA 19122 USA

This year marks the 100<sup>th</sup> anniversary of Seymour Cray's birth in Chippewa Falls, Wisconsin. After high school Cray served in the U.S. Army, as a radio operator in Europe, participating in the Battle of the Bulge, during the winter 1944 - 1945. Then, he transferred to the Pacific theater, where he worked on breaking Japanese naval codes. After WWII, Cray went to the University of Minnesota and graduated with a degree in electrical engineering in 1950. While pursuing a master's degree in mathematics, he joined Engineering Research Associates (ERA) and began designing computers, notably contributing to the UNIVAC 1103. In 1958, Cray left ERA to join other former colleagues, who had created the Control Data Corporation (CDC). There Cray led the design of the CDC 1604, one of the first computers to use transistors. Later he helped create the iconic CDC 3600 and CDC 6600 computers. The latter debuted in 1964 as the world's fastest computer. Cray left CDC in 1972 to create Cray Research Inc., which delivered the first Cray-1 supercomputer to LANL in 1976. Other supercomputers, e.g., the X-MP, Y-MP, etc., were delivered in the 1980s. Seymour Cray died, from injuries suffered from an automobile accident, in 1996. My talk will very briefly review the early history of computers, starting from the creation of electromechanical machines, and electronic vacuum-tube computers. I will then review the advent of commercial transistor-based computers, highlighting the pioneering contributions of Seymour Cray. Notably, for more than 60-years, the name CRAY remains synonymous with the world's fastest supercomputers.