

By: Senator(s) Chassaniol, Blackwell,  
Branning, Fillingane, Simmons (12th), Simmons  
(13th), Jackson (11th), Jackson (32nd)

To: Rules

## SENATE CONCURRENT RESOLUTION NO. 510

1 A CONCURRENT RESOLUTION COMMENDING THE CAREER OF COMPUTER  
2 INNOVATOR DR. JAMES LOTON FLANAGAN OF GREENWOOD, MISSISSIPPI, AND  
3 EXPRESSING THE SYMPATHY OF THE LEGISLATURE ON HIS PASSING.

4 WHEREAS, Dr. James L. Flanagan, whom we can thank for  
5 articulate digital assistants like Siri and intelligible subway  
6 loudspeakers and blame for the voices that inform frustrated  
7 telephone callers to listen carefully because their bank's,  
8 airline's or insurance company's automated customer care options  
9 have changed, passed away on August 25, 2015, at his home in  
10 Warren Township, New Jersey. He was 89 and would have turned 90  
11 the next day. He was from Greenwood, Mississippi, where he was  
12 born on his family's cotton farm; and

13 WHEREAS, Dr. Flanagan, in great measure, is the genius  
14 responsible for making computers "talk." And that's a very  
15 simplistic description of the work of an absolutely brilliant  
16 Mississippi mind. As a leading researcher at AT&T Bell  
17 Laboratories, Dr. Flanagan was a pioneer in the field of  
18 acoustics, envisioning and providing the technical foundation for



19 speech recognition, teleconferencing, MP3 music files and the more  
20 efficient digital transmission of human conversation, most  
21 famously in a 1976 article, "Computers That Talk and Listen:  
22 Man-Machine Communication by Voice," that appeared in *Proceedings*  
23 *of the I.E.E.E.*, a journal published by the Institute of  
24 Electrical and Electronics Engineers; and

25       WHEREAS, James Loton Flanagan was born on his family's cotton  
26 farm in Greenwood, Mississippi, at the edge of the Mississippi  
27 Delta, on August 26, 1925, to Hanks Flanagan, a farmer, and the  
28 former Wilhelmina Barnes. Flanagan graduated from high school in  
29 1943, then attended Mississippi State College for his freshman  
30 year before entering the U.S. Army to serve in World War II.  
31 While in service, he worked at learning signal scrambling and  
32 radar. He returned to Mississippi State University after the war  
33 to earn his Bachelor's degree in Electrical Engineering in 1948.  
34 Flanagan would later earn his Master's and Doctorate at  
35 Massachusetts Institute of Technology. Flanagan received the  
36 Doctor of Science degree in Electrical Engineering from the  
37 Massachusetts Institute of Technology, and then joined the  
38 research division of AT&T Bell Laboratories. He served 33 years  
39 at Bell Labs, retiring in 1990 as Director, Information Principles  
40 Research. His near 200 archival publications, two books, and 50  
41 U.S. patents reflect his technical activities in this interval;  
42 and



43           WHEREAS, his work on automatic speech recognition, machine  
44 synthesis of speech, and efficient signal coding influenced  
45 today's human-machine capabilities and mobile technologies. Under  
46 his aegis, electro-acoustic devices evolved, notably electret  
47 transducers and auto-directive arrays for teleconferencing. He  
48 was elected to the National Academy of Engineering and to the  
49 National Academy of Sciences. Among his awards are the National  
50 Medal of Science, presented at the White House; the L.M. Ericsson  
51 International Prize in Telecommunications, presented in Stockholm  
52 by the King of Sweden; and the Institute of Electrical and  
53 Electronics Engineers Medal of Honor in 2005. He won the Marconi  
54 Prize in 1992. Flanagan received honorary doctorates from the  
55 University of Paris-Sud, from the Polytechnic University of  
56 Madrid, and from his alma mater, Mississippi State University; and

57           WHEREAS, Dr. Flanagan was granted or shared in about 50  
58 patents, including an artificial human larynx and a typewriter  
59 activated by the same audio tones as a push-button phone that  
60 allowed deaf people to communicate remotely. His innovations  
61 included preserving the sound of a human voice while crunching it  
62 digitally, as well as teaching computers to articulate, converting  
63 sound waves into digital pulses. He also helped devise a  
64 "force-feedback" tactile glove, similar to today's video game  
65 accessories, that enabled medical students to simulate hands-on  
66 examinations when a live patient or cadaver was not available (or  
67 to mimic a fame of handball); and



68 WHEREAS, Dr. Flanagan also played a minor role in the drama  
69 surrounding the downfall of President Richard M. Nixon. In 1974,  
70 Dr. Flanagan was one of six acoustical experts appointed by Chief  
71 Judge John J. Sirica of the United States District Court in  
72 Washington who concluded that 18-1/2 minutes of a conversation  
73 between Nixon and his Chief of Staff H.R. Haldeman on June 20,  
74 1972, had been deleted as a result of at least five separate  
75 erasures and re-recordings requiring "hand operation of keyboard  
76 controls." The conversation took place three days after the  
77 break-in at Democratic National Committee Headquarters in the  
78 Watergate Hotel and Office Complex in Washington. Nixon's  
79 personal secretary, Rose Mary Woods, accepted blame for erasing  
80 the first five minutes of the tape, saying she had been  
81 interrupted by a telephone call while transcribing it. But her  
82 explanation was generally dismissed as technically implausible.  
83 Nixon later resigned under threat of impeachment; and

84 WHEREAS, Dr. Flanagan's renown never distanced him from his  
85 Mississippi roots or from his alma mater; and it is with great  
86 pride that we remember his great and good spirit and remarkable  
87 intellect which enriched the lives of all his students and  
88 colleagues and brought honor to the State of Mississippi:

89 NOW, THEREFORE, BE IT RESOLVED BY THE SENATE OF THE STATE OF  
90 MISSISSIPPI, THE HOUSE OF REPRESENTATIVES CONCURRING THEREIN, That  
91 we do hereby commend the career of Computer Innovator Dr. James



92 Loton Flanagan of Greenwood, Mississippi, and express the sympathy  
93 of the Legislature on his passing.

94 BE IT FURTHER RESOLVED, That this resolution be transmitted  
95 to the surviving family of Dr. James Flanagan, forwarded to the  
96 President of Mississippi State University, and made available to  
97 the Capitol Press Corps.

