

UC SANTA BARBARA

Office of the Chancellor

July 24, 2019

Dear Members of our Campus Community,

I am saddened to share the news of the passing of Professor Emeritus Alan Konheim. We extend our deepest condolences to his family. Professor Konheim was an expert on computer security and cryptography, a tremendously dedicated teacher and mentor, and a wonderful friend to his many colleagues. Our campus flag will be lowered in his honor on July 31.

I would like to share this tribute prepared by Sandra Dieron and our Department of Computer Science.

In Memory of Professor Alan Konheim 1934-2019

With a heavy heart, the Computer Science Department announces the passing of one of our Professor Emeriti, Alan Konheim. Professor Konheim joined the UCSB Computer Science Department in 1982 after 22 successful years at IBM Research, Yorktown Heights. He retired from UCSB in 2005.

Professor Konheim is the author of three outstanding books, including *Hashing in Computer Science*, which was published in 2010. Additionally, Professor Konheim authored numerous papers in the areas of computer security, hashing functions, performance evaluation, computer communication, and combinatorial analysis, including many papers which were published in the *Journal of the ACM*, one of the flagship journals in computer science for decades. Professor Konheim was also the author/co-author on four U.S. patents, three in the area of computer security.

Professor Konheim earned his Bachelor of Electrical Engineering from the Polytechnic Institute of Brooklyn in 1955, his Masters in Mathematics from the Polytechnic Institute of Brooklyn in 1957, and received his Ph.D. in Mathematics from Cornell University in 1960.

Prior to joining our department as a professor in 1982, Professor Konheim worked with the mathematics department at the IBM Thomas J. Watson Research Center. In this role, Professor Konheim directed and participated

in the development and analysis of the FIPS 46-3 Data Encryption Standard (DES). He wrote one of the first books in cybersecurity, entitled *Cryptography: A Primer*.

While at UCSB, Professor Konheim gave courses in Discrete Mathematics, Computer Networks and Cryptography. Professor Teo Gonzalez, a colleague and friend of Professor Konheim, noted, "Since joining our department [Alan] started teaching Cryptography as an undergraduate elective. We were the first, or one of the first departments, offering such a course which is now a popular course everywhere it is offered."

Professor Gonzalez went on to say, "I can talk about Alan for hours, but the main thing I remember is that he was a very loyal friend that stood by my side, as well as the side of others, during our most difficult moments."

Other members of our faculty have shared their wonderful memories with Professor Konheim and his wife, Carol, many of the stories centering around Professor Konheim's cooking or receiving early career mentorship from him.

Professor El Abbadi reflected, "Alan and Carol welcomed us to their home when we first arrived in Santa Barbara. Amazing talent, both as a researcher and as a cook."

Both Professors Yang and Bultan mentioned the positive and comforting mentorship presence Professor Konheim exuded during their time as junior faculty in the Department.

Professor Cappello had nothing but praise for Professor Konheim: "He was a highly talented and learned mathematician and a natural leader. He had a passion for interpersonal relationships and was a person of extraordinary personal integrity."

We extend our condolences to Professor Konheim's family during this difficult time.

Sincerely,

Henry T. Yang
Chancellor