

Asian American Engineer of the Year Award

Dr. Anne Kao

Senior Technical Fellow *The Boeing Company*



A Senior Technical Fellow at The Boeing Company, and a generous mentor to engineers at Boeing, in academia and the industry, Dr. Anne Kao is an innovative pioneer and internationally recognized expert in text analytics with 12 significant patents whose tools and methods help solve complex problems and extract key information from large sets of aviation safety, maintenance, manufacturing and intelligence data.

Dr. Anne Kao is an internationally recognized expert in text analytics who is a Senior Technical Fellow at The Boeing Company. Dr. Kao is responsible for leading and coordinating the company's research and development in data analytics, creating an Intellectual Property strategy, collaborating with national and international universities and laboratories, and building depth and breadth in the field to create business values for Boeing.

A text-mining pioneer with a long record of ground-breaking innovation, Dr. Kao's tools and methods help solve complex problems and extract key information from aviation safety, maintenance, manufacturing and intelligence data. She created TRUST text analysis software to help users understand topics in large document collections; KM DocTER which categorizes free-text data to solve challenges in manufacturing, airline maintenance and aviation safety; and P-MATCH and QUBIT which help identify aircraft part names and offer a scalable solution to leverage engineering knowledge from non-professionally authored messy data.

Dr. Kao holds 11 U.S. patents and one European Union patent. She has published several dozen papers in peer-reviewed journals and conference proceedings. She was General Chair for the 2013 Institute of Electrical and Electronics Engineers Intelligence Security Informatics Conference; session Chair at the Society for Industrial and Applied Mathematics Data Mining conference; and Co-chair of the Integrated Multimedia Mining Workshop at SIGKDD. Dr. Kao is an active member of ACM SIGKDD, the Association for Computing Machinery – Special Interest Group: Knowledge Discovery and Data Mining, and co-founder of the Northwest chapter.

A generous mentor, Dr. Kao helps colleagues and students define career paths and improve technical skills, she plays a key role in the Boeing Technical Fellowship, participates in American Women in Science mentoring activities, and is a Washington State University Capstone project advisor. Dr. Kao is founder and lead of the Boeing Analytics Community of Excellence with 1,500 members, and co-founder and organizer of Science on Tap, a Science Café community science education organization in Seattle. Dr. Kao has a bachelor's degree in Philosophy from the National Chengchi University in Taiwan, a master's degree and Ph.D. in Philosophy from the Chinese Cultural University in Taiwan, and a master's degree in Computer Science from San Diego State University. Anne enjoys playing duplicate bridge and recently obtained Silver Life Master status.

