Computing experiments come in all sizes. A jumbo testbed for the Traveling Salesman Problem, for instance, can take years to build, and additional years can be spent designing and running insightful experiments. This talk concentrates on tiny computing experiments that can be conducted in a few minutes. Such experiments include parameter estimation, hypothesis testing, determining functional forms, and conducting “horse races”. This talk also describes how tiny “Math, Science and Engineering” can be done in one’s head or on the back of the proverbial envelope, and shows how to apply it both to computing problems and to problems in everyday life.

Biography

Dr. Jon Bentley is a computer scientist at Avaya Labs Research. His interests include programming techniques, algorithm design, and the design of software tools and interfaces. He has written three books on programming—including the engaging and insightful “Programming Pearls”—and articles on topics ranging from the theory of algorithms to software engineering. He received a B.S. from Stanford in 1974 and an M.S. and Ph.D. from the University of North Carolina in 1976, then taught Computer Science at Carnegie Mellon for six years. He joined Bell Labs in 1982, and retired in 2001 to join Avaya Labs. He has been a visiting faculty member at West Point and Princeton, and has been a member of teams that have shipped software tools, telephone switches, telephones and web services.

All are welcome. For further information, please contact Dr. Linda Kaufman (ext. 2952), kaufmanl@wpunj.edu, or Dr. Cyril S. Ku (ext. 2960), kuc@wpunj.edu