

RUDOLF B. BLAŽEK

E-mail: rblazek@gmail.com

EDUCATION

Ph.D. in Statistics and Probability (1998).

Dissertation: “*Conditional Inference for Incomplete Permutation Bootstraps in Multiple Linear Regression*”. Department of Statistics and Probability, Michigan State University, USA.

Magistr (M.Sc. equivalent) in Statistics and Probability (1991).

Faculty of Mathematics and Physics, Charles University (MFF UK), Prague, the Czech Republic.

EMPLOYMENT

Assistant Professor (2010 to present). Head of the Network Security Research Group. Department of Computer Systems and Department of Applied Mathematics, Faculty of Information Technology, Czech Technical University in Prague, the Czech Republic.

Research Assistant Professor (2006 to 2010). Communications Research Center and Department of Communications Engineering, Yuan Ze University, Taiwan.

Senior Scientist (2003 to 2006). In 2003 named the Director of Algorithm and Software Development. Advanced Science and Novel Technology, Los Angeles, California, USA.

Assistant Professor of Mathematics (1999 to 2003 non-tenure track; adjunct status from 2003 to 2006). In 2001 named the Director of Online Instruction. Department of Mathematics and Center for Applied Mathematical Sciences, University of Southern California, USA.

Graduate Assistant (1991 to 1998). Lecturing in statistics. Michigan State University, USA.

CURRENT RESPONSIBILITIES

Head of the Network Security Research Group: Supervisor of a research team for several research projects in network security and signal processing. Thesis committee chairman and member for several Ph.D. and M.Sc. students in network security, signal processing, and computer science.

Curriculum Guarantor: Responsible for the content of a graduate network security course for all students of selected majors, and college-wide graduate and undergraduate statistics courses required for all students in all majors.

Lecturing: Graduate courses: Network Security; Random Processes; Discrete Stochastic Processes; Queueing Theory; Advanced Statistical Methods (PhD level); Probability and Statistics for Informatics; Analysis of Variance and Design; Resampling techniques. Undergraduate courses: Statistics courses for engineering majors.

PAST PROFESSIONAL EXPERIENCE

Academic Research in the USA: Co-principal investigator for several projects related to network security and signal and image processing. For various US government agencies, including DARPA, Department of Defense, Office of Naval Research. Center for Applied Mathematical Sciences, Department of Mathematics, University of Southern California.

Industrial Research and Development: As the Director of Algorithm and Software Development, responsible for several research projects for various U.S. government agencies, including the Department of Defense. Advanced Science and Novel Technology, Los Angeles, California.

Academic Research in Taiwan: (1) Co-principal investigator for a project to design a statistical intrusion detection system for 802.11 wireless networks. (2) Principal investigator for a subproject to develop an error correction algorithm via multimedia post-processing (co-PI of a large project to develop “Digital Home” key technologies). Communications Research Center, Yuan Ze University, Taiwan.

Collaboration Infrastructure: Integration, development, and supervision of research collaboration services and virtualized data center for: (1) project management, (2) content and web presence management, (3) scientific conference publication management. College of Electrical and Communication Engineering, Yuan Ze University, Taiwan.

Director of Online Instruction: In this function, responsible for supervision and design of an SQL database driven system for automated student examination and online instruction for courses in the Department of Mathematics, University of Southern California.

Research Team Management: Supervisor of a research team of graduate students for several research projects in USC’s Center for Applied Mathematical Sciences.

Consulting for a Financial Institution (1996). A half-year consulting project concerning statistical analysis of mortgage refinancing and total production data. Old Kent Mortgage Company and Michigan State University.

Statistical Computing Consultant (1995–1997). Consulting services for MSU students and faculty concerning SAS, SPSS, Mathematica and other statistical packages used on the mainframe, Unix servers, and on networked personal computers. Computer Laboratory, Michigan State University.

AFFILIATIONS

Member of the American Statistical Association (ASA) and the IEEE.

LANGUAGES

Czech	– native speaker	Russian	– fair
English	– fluent (over 19 years of lecturing)	German	– basic communication
Chinese	– basic communication		

OTHER SKILLS

Network and Software Security: Network and software penetration testing, network intrusion detection and simulations: Qualys, HP Fortify, OWASP Zed Application Proxy, Kali linux, Nessus, ettercap, dsniff, sslstrip, Scapy, ns2 simulator, Emulab, NfSen, Snort.

Scientific Computing: Mathematica, Matlab, S-Plus, SPSS, SAS, Java, C, C++, Objective C, Object Oriented Pascal, Fortran, Basic, \LaTeX .

Server Technologies: Server virtualization, SQL databases (MySQL, FrontBase, Oracle, JDBC & ODBC), Java Servlets, JavaServer Pages, WebObjects, Web Services.

Aviation: Dr. Blažek is the holder of a private pilot license (issued by FAA, USA).