Kan Li

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EDUCATION

University of Texas - Health Science Center at Houston *Aug 2013*

- Ph.D. in Biostatistics (in progress)

M.S. Industrial Engineering **University of Pittsburgh** *May 2011*

- GPA: 3.86/4.0
- Concentration: application of operations research to healthcare delivery

B.S. Industrial Automation **Beijing Institute of Technology** *July 2009*

- GPA: 3.75/4.0
- Concentration: measurement, instrumentation, process automation and process operations

WORK EXPERIENCE

University of Pittsburgh, Center for Public Health Practice *Sep. 2011 - present*
Research Associate

- Provide expertise in quantitative methods to public health projects throughout the Department.
- Assist teams on sampling design and data collection.
- Conduct data manipulation and advanced statistical analysis for specific research objectives.
- Develop simulation and optimization models for decision analysis using object oriented programming.
- Serve as primary author for the statistical and methodological sections of manuscripts and presentations.

University of Pittsburgh, Public Health Dynamics Laboratory *Jan. 2010 - Aug. 2011*
Graduate Research Assistant

- Applied a variety of operations research techniques to solve operational and management problems in healthcare delivery.
- Developed mathematical models to optimize system performance in resource allocation, capabilities-based planning and cost control.
- Developed complex spreadsheet models with VBA in EXCEL to analyze cost-benefit and assess courses of action.
- Assisted with presentation of results and scientific papers for publication.

University of Pittsburgh, School of Engineering *Fall 2010, Spring 2011*
Teaching Assistant/Fellows

- Simulation with Arena (Undergraduate)
  - Conducted a three-hour weekly lecture independently for 13 sessions during the semester.
  - Organized class activates, made original lecture materials, exercises, homework and quizzes.
  - Guided students on their semester projects and held regular office hours.
- Statistics and Data analysis (Graduate)
- Engineering Computing II - MATLAB & C++ (Undergraduate)
  - Coordinated with instructor on class activities.
  - Held regular office hours to tutor students in course works.

PROJECT EXPERIENCE

Social Mixing and Respiratory Transmission in Schools *Sep. 2011 - present*

- A CDC founded project that attempts to quantify the contact pattern of school age children and study respiratory transmission in school settings.
- Developed agent-based simulation models of infectious disease transmission and evaluated intervention strategies via simulation and statistical analysis.
- Parsed large data set to reconstruct social contact networks, conducted network analysis and parameterized simulation models.

Vaccine Modeling Initiative *Jan. 2010 - Aug. 2011*

- The objective of the VMI is improved decision-making in the selection of new vaccine products and epidemic control policies. VMI is funded by the Bill & Melinda Gates Foundation.
- Developed computational models for optimizing vaccine wastage, distribution network design, inventory control and vaccine administration.
- Developed practical spreadsheet based tools for the use of health care workers in the field.

HONORS & AWARDS

- **TA/GSRs Assistantship**, University of Pittsburgh *Jan. 2010 - Aug. 2011*
- **Outstanding Graduating Student** (Top 5%), Beijing Institute of Technology *Jun. 2009*
- **Honors Thesis for Bachelor Degree** (2 out of 59), Beijing Institute of Technology *Jun. 2009*
- **National Scholarship** (Top 1%), Chinese Ministries of Education *Dec. 2007*
- **Outstanding Student Scholarship** (Top 5%), Beijing Institute of Technology *2006 - 2009*

CERTIFICATIONS

- **SAS Base Programming Certificate** *May. 2013*
- **SAS Advanced Programming Certificate** *July. 2013*

COMPUTER SKILLS

Programming Languages: Java, C/C++, VBA, SQL, HTML/CSS/JavaScript, XML

Statistical Packages: R, SAS, Minitab

Simulation/Optimization: Repast S, Arena, GLPK/GMPL, CPLEX

Other Software: Excel, Access, MySQL, LaTeX, ArcGIS, AutoCAD

Operation System: Ubuntu based Linux

REFERENCES

Shawn Brown, Director of Public Health Applications
Pittsburgh Supercomputing Center, Carnegie Mellon University
Photo: 412-760-9837
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Bryan A. Norman, Associate Professor
Department of Industrial Engineering, University of Pittsburgh
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Charles J. Vukotich, Senior Project Manager
Center for Public Health Practice, Graduate School of Public Health, University of Pittsburgh
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