EDUCATION   *Bachelor of Engineering,* Hydrology and Water Resources
School of Water Resources and Hydropower Engineering, Wuhan University

Master of Engineering, Hydrology and Water Resources
Institute of Hydrology and Water Resources, Tsinghua University, expected July 2015

COMPUTER SKILLS   *Languages & Software:* Lisp, C, Python, LaTeX ; Matlab, Mathematica, R, Mysql, ,Git, vim, ArcGIS, Grapher, AutoCAD .
Operating Systems: Linux, Windows.

MATH SKILLS   Analysis, Probability Theory, Statistics, Stochastic Process, Linear Algebra, Operations Research, Numerical Analysis, Information Theory, Machine Learning.

ACADEMIC WORK   *Hydrological Models*

- Conceptual Precipitation-Runoff Models: TOPMODEL, XINANJIANG Model, Shanbei Model, HyMod.
- Coupling of Water-Heat Correlation Models & Stochastic Soil Moisture Model.
- Parameter Estimation: Gene Algorithm, Particle Swarm Optimizer, SCE-UA.
- Data-Driven Models: Support Vector Machine, Artificial Neutral Network.

Stochastic Hydrology

- Hydrological Time Series Analysis
- Information Theory Applied In Hydrology

Hydrometeorology

- Boundary Layer Theory
- Comparison of Evapotranspiration Equations

Field Experiments

- Soil Characteristic Field Experiments and Hydrometeorology Observation Station Construction in the Upper Hehei Basin
- Plants and Soil-Water Characteristic Investigation in Talimu Watershed, Xinjiang Province

ACADEMIC EXPERIENCE   *Presentation*

- Oral Presentation in the The 2nd and 3rd CAS/THU Hydrology and Water Resource Symposium
- Poster Presentation in the American Geophysical Union 2014 Meeting

Publication

- Pan, B. and Cong, Z. Information Analysis of Watershed Hydrological Patterns across Temporal Scales (to be submitted).