SKILLS

Data fusion/mining (disparate, multivariate, nonlinear, sparse, spatiotemporal)
Dimension-reduction techniques (linear and non-linear)
Downscaling and spatiotemporal modeling of climate/change data
Groundwater modeling (water, heat, solute/reactive; coupled; forward/inverse)
Groundwater software experience (commercial and research)
Hybrid modeling (machine-learning with traditional models)
Integrated assessments (climate, ecological, ecosystem, hazards, land use, minerals, water)
Machine learning applications (classification, prediction, supervised/unsupervised, Gaussian)
Numerical model development (coupled/nonlinear PDEs; finite-element/difference, stochastic)
Methods and modeling (GIS, ecological, geophysical, hydrologic, unsaturated)
Optimization methods (annealing, gradient, joint, metaheuristic, linear programming, MCMC)
Predictive model building and uncertainty quantification (statistical, data mining, hybrid)
Programming proficiency (C++, Fortran, VBA; R, Python and Matlab)
Reduced order methods (PCA; vector-quantization/cross-component planes, genetic & doping)
Regression (linear/nonlinear, quantile, symbolic, Bayesian)
Remote sensing (landscape classification, large scale fluxes)
Statistical modeling (clustering, spatial/time-series; estimation, forecasting, simulation)
Statistical software (R, Crystal Ball, GSLIB, Minitab)
Written and oral communication skills (presentations, proposals, journal articles)
Working experience with stakeholders and leading multi-disciplinary international teams
Years of experience mentoring students, post-docs, and visiting scientists