In this talk I will touch briefly on five different subjects that stem from my 10 most cited papers spanning 43 years, namely:

Variable Projections (VARPRO), fast Vandermonde solvers and multidimensional polynomial approximation (VANDER), deferred corrections (PASVA series), seismic ray tracing (RAY3D, TERRASA) and least squares data fitting (book). The names in parenthesis correspond to public domain software associated with the topic.