

Software Development

Expertise Structural Engineering, Computational Mechanics, Numerical Modeling

Education Ph.D. (Structural Engineering), 1997
M.Sc. (Structural Engineering), 1994
University of Colorado at Boulder
B.Sc. (Engineering), 1990, University of Belgrade, Yugoslavia

Professional Experience

1998 — Present *Itasca Consulting Group, Inc., Minneapolis, Minnesota*
Software Engineer

1991 — 1998 *University of Colorado at Boulder*
Teaching Assistant/Research Assistant/Research Associate

Project Experience

Software Development — Development of a post-processor for a finite-element program using GKS; development of programs with graphical interfaces for instructional purposes (foundation analysis, Mohr circle); development of a probabilistic-based code for the analysis of a truss with softening material behavior. FORTRAN and C/C++ programming development and support for Itasca’s FLAC and FLAC3D software; assistance with the development and testing of the Graphical Interface for Itasca Codes (GIIC).

Structural Engineering — Ultrasonic tests of prismatic concrete specimens under uniaxial compressive cyclic loading by means of longitudinal and shear waves; two-dimensional finite-element simulations of wave propagation in loaded and unloaded concrete specimens; ultrasonic testing of steel specimens loaded into the plastic regime; finite-element simulations of wave propagation in loaded steel specimens; Development of a pseudodynamic test program for testing of structures; implementation of improved implicit time integration scheme; pseudodynamic tests on a two-degree-of-freedom steel structure as a part of code validation.