

Short curriculum vitae

Born in Ostrava, Czech Republic

Academic qualification

2023 Master degree (**Ing.**) in Applied Mechanics, VŠB-Technical University of Ostrava

2019 Bachelor degree (**Bc.**) in Applied Mechanics, VŠB-Technical University of Ostrava

Work experience

2023 - now Department of Applied Mathematics and Computational Sciences,
Institute of Geonics of the Czech Academy of Sciences, Ostrava
(Ph.D. student from 2023)

Professional interests

- **Ph.D. student** in Computational and Applied Mathematics, VŠB-Technical University of Ostrava, started in 2023, thesis *Parallel implementation of the FETI approach applied to contact problems in granular dynamics*, supervised by Doc. Ing. David Horák, Ph.D.
- **Iterative solution of the systems of linear algebraic equations and problems of quadratic programming with equality and inequality constraints** - application mainly to equations and problems arising from (decomposed) FEM-discretised problems of linear elasticity), testing various preconditioning and deflation techniques on these problems, respectively, on the applied iterative solution method.
- **Domain decomposition methods (DDM)** - application (testing) of the FETI type DDM: ((T)FETI-1, FETI-DP) without and with various ways of their preconditioning and of the deflated methods (T)FETI-1, denoted as (T)FETI-2, for various variants of their deflation, and HTFETI-1 with various methods of aggregating subdomains into clusters, to the (discretized) problems of mechanics (elasticity).