



Geotechnical Engineering Modelling Software (GEMSai)

**At GEMSai,
Engineering Meets
Intelligence**

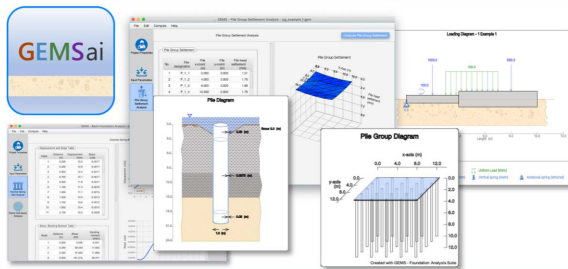
GEMSai has been at the forefront of foundation analysis and design software for years, delivering advanced finite element modelling (FEM) software that engineers trust.

Now, with the power of AI, we are reshaping the future of geotechnical engineering:

- Designs that are **faster**
- Workflows that are **smarter**
- Insights that are more contextually **relevant**

Geotechnical Engineering Modelling Software
(GEMSai)

Foundation Analysis Suite



www.gemsoftware.ai

Subscription Plans That Fit Your Projects & Budgets

- Affordable annual or multi- year options
- Single user & Network licenses

Education Bundles

- With Teaching Material
- Classroom on the Cloud

Our Proven Geotechnical Modelling Capabilities

- Finite Element Modelling for shallow & deep foundations
- Comprehensive soil-structure interaction analysis
- Standards driven: Support for IS-2911, API & global standards
- Robust analysis of settlement, lateral response, earthquake and group effects

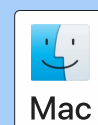
What AI Brings to Geotechnical Design

- AI Design Wizard - contextual recommendations and instant query support
- AI Workflows - For commonly evaluated scenarios
- Rapid Optimizations - Evaluates multiple options converging on best solutions quickly

Your Advantage with **GEMSai**

- **Reduce** modelling and design cycle time
- **Improve** accuracy and minimize rework
- **Improved design** through optimal solution

 **Windows**





Pile Foundation (Land, Bridge & Waterfront structures)

- Pile capacity estimation
- Axial load settlement analysis
- Lateral load analysis - Defl, BM and SF
- Driven, Bored, Driven cast-insitu, CFA piles
- Piles of various cross-sections
- IS-2911, API-2011, API-2000, Hybrid (earthquake) & other methods for analysis



Offshore Pile Foundation

- Pile capacity estimation
- Axial load settlement analysis
- Lateral load analysis - Defl, BM and SF
- API-2011, API-2000, REESE, Hybrid (earthquake) & other methods for analysis
- p-y, t-z and Q-z curves based on soil properties
- Static and cyclic loading scenarios



Pile Group Settlement Analysis

- Pile group settlement
- Design load estimate
- Facility to use load test results
- Analysis of rigid and flexible cap piles
- Driven, Bored, Driven cast-insitu, CFA piles
- IS-2911, API-2011, API-2000 and other methods for analysis



Raft Foundation

- Discrete spring-bed model (Winkler)
- Elastic half-space model
- Multi-layered soil model
- Rectangular, circular & user defined raft geometry
- Concentrated loads, moments, uniformly distributed loads, line loads
- Immediate and long term behavior
- No-tension analysis



Combined Footing

- Discrete spring-bed model (Winkler)
- Elastic half-space model



Embedded Walls

- Cantilever walls
- Anchored walls
- Deflection, Shear, & BM Analysis
- Dual design philosophy
 - Ultimate limit state approach
 - Global factor of safety approach

Our clientele includes government agencies, leading consultants and academic institutions worldwide.

**Join the AI revolution in geotechnical design
Explore, Design, Validate Faster, Smarter.**

Contact & Enquiries

Geotechnical Engineering Modelling Software (GEMS) LLP

Email: support@gemsoftware.ai
Phone: +91 89519 79745

Web: www.gemsoftware.ai
Office: Bengaluru, India



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