

# ALIREZA AFKHAMI-AGHDA, M.A.Sc, M.C.P, P.ENG

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## HIGHLIGHTS

16 years of experience in project management, proposal and report writing, field reviews, engineering analyses, retaining wall design, numerical analysis, etc

## EDUCATIONS

**M.A.Sc. Geotechnical Engineering:** September 1997 to March 1999

Tehran Polytechnic University (Amirkabir), Civil Engineering Department, Tehran, Iran; Research Topic: "Dynamic analysis of reinforced soil in seismic conditions" a numerical modeling and analysis using LUSAS Software.

**B.Sc. Civil Engineering :** September 1992 to July 1997

Sharif University of Technology, Civil Engineering Department, Tehran, Iran.

**Design of Piled Foundation : Short Course:** May 2012

by Dr. Bengt Fillenius, Vancouver, Vancouver, Canada

**Supplementary Soil Liquefaction : Short Course:** November 2010

by Prof. Boulanger, Vancouver, Canada

**Soil Liquefaction : Short Course:** December 2009

by Prof. Idriss & Prof. Boulanger, Vancouver, Canada

## JOB EXPERIENCE

**Tetra Tech EBA, CANADA** (June 2012-now) <http://www.eba.ca>

Project management, seismic analyses, field reviews, pile design, etc. Project highlights: ILM, Evergreen Line, Northeast Anthony Henday

**exp Services Inc., CANADA** (January 2012-June 2012) <http://www.exp.com>

As a fulltime intermediate geotechnical engineer I have been responsible for site characterization and engineering analysis such as soil liquefaction analysis, site-specific response analysis, pile design, etc as well as working with other team members. To mention some, I was involved in Evergreen Rapid Transit Line (seismic design during bidding phase), Kitimat LNG Site (seismic and geotech design), RBRC (combo project in Surrey).

**HORIZON Engineering Inc., CANADA** (June 2008-January 2012 ) <http://www.horizoneng.ca>

As a fulltime intermediate geotechnical engineer I have been responsible for:

- Field assessment including supervision on drilling / test pit excavation, and field reviews for subgrade, excavations, pile driving, ground improvement, etc.; borehole log drafting using gINT
- Preparations of proposals (scope of services, budget estimate, etc)
- Preparation of geotechnical reports (bearing capacity and settlement, pile design, soil liquefaction assessment, CPT interpretation, SPT and DCPT corrections and correlations, shoring design, etc.)
- Designing segmental retaining wall (Lock Block, Deltalok, and Allan Block)
- Slope stability analysis and MSE wall design (with or without geogrid) using ReSSA, SlopeW (GeoSlope) and Xstable programs
- Pile analysis using LPILE software
- Project management and liaising with client and other consultants; client development

**NOVO TECH SOFTWARE Ltd., CANADA** (April 2009-Now on my spare time) <http://www.novotechsoftware.com>  
I started this company in April 2009 with the objective of development and marketing of geotechnical engineering software: SPT correlations program, soil liquefaction analysis program, CPT interpretation software, 3D soil profile generator, geotechnical formulas collection, as well as lab test web application and SPT correlation iPhone App.

**SOILVISION Systems Ltd., CANADA** (October 2007-June 2008 ) <http://www.soilvision.com>

- Providing geotechnical engineering services including “Numerical modeling” of heap leach material, unsaturated soils, analyzing and interpreting climate data, regular presentations of geotechnical calculations, working with Surfer/AutoCAD drawings, etc.
- Software development

(Part-time from January 2007 to September 2007; Fulltime since October 2007 to June 2008)

**AZMON KHAK PEY Geotechnical Eng. Co., Tehran, Iran** (2003 - 2007)

- Project Manager (supervising field crew, lab technicians and junior engineers, liaising with clients and structural/architectural engineer)
- Processing soil laboratory tests
- Writing proposals and geotechnical reports (bearing capacity, liquefaction, pile design, etc.)
- Projects such as buildings, high-rises, pipelines, refineries, drainage systems, factories, etc.
- Field review (excavations)

**Tehran Engineering and Technical Consulting Organization, Tehran, Iran** (1999 – 2004)

- Project Manager (supervising 3 engineers, contact with clients and structural engineers)
- Processing soil laboratory tests and site /laboratory investigations
- Writing geotechnical reports, selecting the best foundation type, earth pressures, bearing capacity and settlement, soil liquefaction, etc.

This organization (<http://www.tetco.org>) is a subdivision of Tehran municipality. Projects mostly consisted of bridges, multi-storey parking, concrete water courses and small buildings in Tehran.

**MANDRO Geotechnical Eng. Co., Tehran, Iran** (1997 - 1999) <http://www.chase-mandro.com>

- Providing geotechnical study reports for a variety of structures including urban and industrial buildings, refineries, water canals and pipelines. Soil tests assessment and writing geotechnical reports (bearing capacity, liquefaction, pile design, etc.)
- Assessment of laboratory and field tests. Six months working in “South Pars Field Development (Persian gulf)” project as a field inspector under direct supervision of TOTAL company management team.

**PEY ABKAV Geotechnical Eng. Co., Tehran, Iran**

Providing geotechnical study reports (some including geological and seismic studies), processing laboratory tests and managing projects such as high rise buildings and hotels. (Occasional part-time consultation since 2001 to 2003).

**JARF ANDISH Systems Co., Tehran, Iran** (2003-2007 on my spare time)

Co-founder; developing two commercial geotechnical programs currently being used by more than 40 geotechnical companies in Iran including “Road and Transportation Ministry”. For a complete description of these software and their programs features please visit:

- Soil Mechanics Test Processor software : <http://www.novolab2.com>
- PEYSANJ Geotechnical Calculation software : <http://www.peysanj.com>

## AFFILIATIONS / DESIGNATIONS

- **APEG BC** Member (P.Eng)
- **Vancouver Geotechnical Society**, Member, Since 2008
- **Canadian Dam Association**, Member, Since 2008
- **International Society for Soil Mechanics and Geotechnical Engineering (ISSGE)**, Member, Since 2006
- **Iranian Construction Engineers Organization**, Member, Since 2007
- **Iranian Society of Geotechnical Engineers (IGS)**, Member, Since 1998

## SEMINARS

I have presented the following seminars:

**Introducing SMTP Soil Mechanics Software**, for Geotechnical engineering society of Mashhad city, Iran (Aug. 2007), Road and Transportation Ministry, Iran (Jan. 2007)

**Application of SMTP software by using GIS data**, for Tehran Post-disaster Management Organization, Iran (Aug. 2007)

**Introducing PEYSANJ Geotechnical Software**, for Road and Transportation Ministry, Iran, Tehran (Feb. 2007)

**Installation and Training Courses for SMTP and PEYSANJ Software**, Road and Transportation Ministry, Iran (March. & April 2007)

## PUBLICATIONS / CONFERENCES

- **A Case Study of Ground Improvement Using Impact Piers Method**, Alireza Afkhami-Aghda, Troy Issigonis; 62<sup>nd</sup> Canadian Geotechnical Conference, September 2009 (Oral Presentation)
- **A Case Study of Ground Improvement Using Impact Piers Method**, Alireza Afkhami-Aghda, Troy Issigonis; Geotechnical News magazine, March 2010
- **3<sup>rd</sup> International Conference of Geotechnical Engineering**, tradeshow exhibitor: introducing PEYSANJ geotechnical software, Iran, Tehran, 2003
- **Introduction to PEYSANJ Geotechnical Software**, published in “Sakht o Saz” and “Web” magazines, Iran, 2001
- **NovoSPT, NovoCPT, NovoLiq, VisLog user manuals**, 2009-2010

## ADDITIONAL CERTIFICATES



**Microsoft® Certified Professional (MCP)**

Designing and Implementing Desktop Applications with Microsoft® Visual Basic, (since Nov. 2000)



**International Computer Driving License (ICDL)**

(Since March 2003)

## REFERENCES

References are available upon request