

Curriculum Vitae

Pouya Ahmadi, PhD.

Geophysicist at Seistech

Subsurface Imaging and Processing Technologies' Researcher

Mobile: 0406432424

E-mail: pouya@seistech.com.au

Education

From	To	Program	University	Status
Apr. 2014	Dec. 2018	Ph.D., Exploration Geophysics , Thesis: " <i>Feasibility of Multicomponent Seismic for Mineral Exploration</i> ". Supervisor: Prof. Milovan Urosevic	Curtin University	Completed
Sep. 2010	Jun. 2013	M.Sc., Physics (Geophysics) , Thesis: " <i>Elastic anisotropy of rocks in both seismic and ultrasonic frequencies: an example from the Bergslagen region, central Sweden</i> ". Supervisor: Prof. Alireza Malehmir	Uppsala University, Department of Earth Science	Completed
Sep. 2008	Sep. 2010	M.Sc., Earth Science (Geophysics, Exploration Seismology) , Thesis: " <i>Comparison of local correlation and smart stacking in stacking seismic data</i> ". Supervisor: Prof. Majid Nabi-Bidhendi	University of Tehran, Institute of Geophysics	Completed
Sep. 2003	Sep. 2008	B.Sc., Physics (Solid State) , Thesis: " <i>Measurement of Thin Films Using Moiré Fringes</i> ". Supervisor: A/Prof. Khosrow Hassani	University of Tehran, Department of Physics	Completed

Work Experience

From	To	Company
Aug. 2021	Current	Seistech Tasks: <ul style="list-style-type: none"> - Expert in planning, acquisition, data wrangling and subsurface imaging of seismic data for deep or near surface targets - Multi-component seismic survey processing subject matter expert (SME) - Seismic processing - Innovative and novel algorithms in seismic Imaging - Implementation of Distributed Acoustic Sensing (DAS) technology in exploration geophysics in hard rock environment Position: Geophysicist
Aug. 2019	Current	Curtin University, Centre for Exploration Geophysics Tasks: <ul style="list-style-type: none"> - Distributed Acoustic Sensing (DAS) researcher in planning, acquisition, data wrangling and subsurface imaging - Extensive research and implementation of DAS technology in exploration geophysics in hard rock environment (refer to the “Research Projects” section) - Multi-component seismic survey processing subject matter expert (SME) - “Seismic Imaging and Modeling” and “Geophysical Data Processing” lecturer and laboratory instructor Position: Research assistant/lecturer
Apr. 2014	Apr. 2019	Curtin University, Discipline of Exploration Geophysics Tasks: <ul style="list-style-type: none"> - Innovative and novel algorithms in multi-component seismic data processing - Multi-component seismic researcher in planning, acquisition, data wrangling and subsurface imaging Position: Research assistant/PhD student
Dec. 2009	May 2010	Dana Geophysics, Dana Energy Position: Junior Geophysicist

Publications

- **Ahmadi P.**, Asgharzadeh M., Urosevic M., Dzunic A., Grant A., “*3D/3C Seismic Imaging in Hard Rock Environment: A Feasibility Study from ROYHILL, Western Australia*”, 2021, Manuscript.
- **Ahmadi P.**, Asgharzadeh M., Urosevic M., Dzunic A., Madadi M., Bona A., Fabris A., “*2D/3C Seismic Imaging in Hard Rock Environment: A Feasibility Study from MSDP10, South Australia*”, 2021, Manuscript.
- Mehdi Asgharzadeh, **Pouya Ahmadi**, Andrej Bona, Milovan Urosevic, “*Inversion based accuracy analysis of nonhyperbolic moveout equations in orthotropic media*”, 2021, Manuscript.
- Mehdi Asgharzadeh, **Pouya Ahmadi**, Andrej Bona, Milovan Urosevic, “*Orthotropic anisotropy analysis and parameter estimation from 3D vertical seismic profile data*”, 2020, submitted.
- Mehdi Asgharzadeh, **Pouya Ahmadi**, Milovan Urosevic, “*Seismic Interferometry for near surface Imaging*”, SEISMIX 2020, Perth.
- **Pouya Ahmadi**, “*Feasibility of Multicomponent Seismic for Mineral Exploration*”, PhD thesis, Discipline of Exploration Geophysics, WASM: Minerals, Energy and Chemical Engineering Curtin University, 2018, <https://espace.curtin.edu.au> .

- **Ahmadi P.**, Urosevic M., Dzunic A., “*3D/3C Seismic Processing Report for Roy Hill Iron Ore Prospecting Project*”, project report submitted to BHP, 2017.
- Dzunic A., **Ahmadi P.**, Bona A., “*Seismic Processing Report for MSDP Line 10*”, Interim Technical Report, Project 3.1: 3D Seismic Exploration for Hard Rock Environments, DET CRC and Geological Survey of South Australia, 2016.
- Dzunic Aleksandar M., **Ahmadi Pouya**, Madadi Mahyar, Bona Andrej, “*Introducing 3rd Dimension into 2D Reflective Seismic Exploration in the Complex Hard Rock Environment*”, ASEG-PESA Extended Abstracts 2016, Adelaide, <https://doi.org/10.1071/ASEG2016ab227> .
- M.J. Khoshnavaz, A. Bóna, M. Urosevic, S. Ziramov, **P. Ahmadi**, “*Pre-stack Diffraction Imaging and Its Application in Hard Rock Environment*”, EAGE conference 2015, Madrid, <https://doi.org/10.3997/2214-4609.201413006> .
- **Ahmadi Pouya**, Malehmir Alireza, “*Laser Doppler Interferometry (LDI) to Obtain Full Stiffness Tensor: A Case Study on A Deformation Zone in Sweden*”, ASEG-PESA Extended Abstracts 2015, Perth, <https://doi.org/10.1071/ASEG2015ab128> .
- **Pouya Ahmadi**, “*Elastic anisotropy of rocks in both seismic and ultrasonic frequencies: an example from the Bergslagen region, central Sweden*”, MSc thesis, Department of Earth Sciences, Uppsala University, 2013. <http://www.diva-portal.org>
- Malehmir A., **Ahmadi P.**, Lundberg E., Dahlin P., Juhlin C., Sjöström H. and Högdahl K., “*Reflection Seismic and Petrophysical Investigations over A Series of Major Deformation Zones in Eastern Sweden*”, EGU conference 2013, Vienna, <https://meetingorganizer.copernicus.org/EGU2013/EGU2013-7593> .
- **Ahmadi P.**, Malehmir A., “*Elastic Anisotropy of Deformation Zones: From Lab Measurements to Real Seismic Data, An Example from Eastern Sweden*”, EAGE conference 2013, London, <https://doi.org/10.3997/2214-4609.20130756> .
- **Pouya Ahmadi**, “*Comparison of local correlation and smart stacking in stacking seismic data*”, MSc thesis in Persian language, Institute of Geophysics, University of Tehran, 2010.
- **Pouya Ahmadi**, “*Measurement of Thin Films Using Moiré Fringes*”, BSc thesis in Persian language, Department of Physics, University of Tehran, 2008.

Research Projects

- **DAS Seismic Field Acquisition and Data Processing for Curtin University**
 - Iluka, WA, Hiseis, 2020.
 - Balranald trial, WA, Hiseis, 2019
 - Lake Carey 2D and 3D, WA, Matsa Resources, 2020.
 - Red October, WA, Matsa Resources, 2020.
 - Fortitude North, WA, Matsa Resources, 2019.
 - ROYHILL, WA, BHP, 2019.
 - Callawa, WA, BHP, 2019.
- **Seismic Field Acquisition and Data Processing for Curtin University**
 - Thompson Lake 2D and 3D, WA, Water Corp., 2020.
 - MSDP10, Port Augusta, SA, GSSA, 2016.
 - MSDP01 and 02, Port Augusta, SA, GSSA, 2015.
 - VIMY lines, Kalgoorlie, WA, VIMY Resources, 2015.
- **“MSDP Seismic Workshop: 3-Component Seismic from MSDP10”**
 - **Ahmadi, P.**, Dzunic, A., and Urosevic, M., ARRC building, Kensington 6151, WA, October 2016.
- **MADAGASCAR workshop,**
 - Jeffrey Shragge, Toby Potter, Ben Witten, Aaron Girard and Taka Miyoshi, July 2015.
- **Potential Field Data Acquisition for Uppsala University** (Walking Magnetics, Gravimetry, MagnetoTelluric and DGPS)
 - Alnö, Sweden, July 2012.

- Dannemora, Sweden, October 2012.
- **COMSOL Multiphysics Modelling Simulation**
 - “Modelling heat transfer in free convection cases in porous media”, as a part of “Simulation of Geophysical Systems” course, Uppsala University, Uppsala, Sweden, August 2012.
- **SDNC Workshop on Geothermal Energy**
 - Soultz-sous-Forêts, France, October 2011.
- **Potential Field and Seismic Refraction Data Acquisition**
 - “Applied Geophysics” course” Björklinge, Uppsala, Sweden, October 2010.
- **MSc Seminar: “Shaping Regularization in Geophysical-estimation Problems”**
 - Institute of Geophysics, University of Tehran, August 2010.

Technical Interests

- ✓ Distributed acoustic sensing (DAS) data acquisition
- ✓ Distributed acoustic sensing (DAS) data imaging and processing
- ✓ Multi-component seismic processing for mineral exploration
- ✓ Seismic Acquisition and Processing for shallow targets (Tomography, MASW)
- ✓ Potential Field Data Acquisition (Gravimetry, Magnetometry)

Computer Skills

- Seismic Acquisition
 - Seistronix EX-6 recorder
- Seismic Processing and Interpretation
 - Landmark’s Seispace
 - Globe Claritas
 - OpendTect
 - Madagascar
- Programming Languages
 - MATLAB
 - Python
- Modelling Software Packages
 - COMSOL Multiphysics
 - TESSEREL
 - SOFI3D
- Software Packages
 - LATEX
 - Adobe Package (Photoshop, Illustrator, Reader)
 - Microsoft Office (Word, Excel and PowerPoint)

Honors and Awards

- Stipend scholarship from Deep Exploration Technology CRC valued \$90k
- Tuition fee scholarship (CIPRS) from Curtin University valued \$140K
- Master thesis fund from National Iranian Oil Company (NIOC)
- Conference travel fund from EAGE (LONDON 2013)
- Financial fund for field data acquisition (Electromagnetic and Gravimetric Measurements Alnö, Sweden, 2012)

Memberships

- SEG Member
- ASEG Member
- EAGE Member

Extracurricular Activities and Hobbies

- Soccer
- Extensive Hiking
- Reading
- Self-training
- Mountaineering
- Photography
- Camping and Outdoor Activities
- Video Gaming
- Swimming and Snorkeling

References

- **Dr. Milovan Urosevic**
Adjunct Professor, Centre for Exploration Geophysics, WASM: Minerals, Energy and Chemical Engineering, Curtin University.
Address: GPO Box U1987, Perth, Western Australia, 6845
Email: M.Urosevic(at)curtin.edu.au
Phone: +618-9266-2296
Web: <https://staffportal.curtin.edu.au/staff/profile/view/M.Urosevic/>
- **Dr. Andrej Bona**
Professor, Centre for Exploration Geophysics, WASM: Minerals, Energy and Chemical Engineering, Curtin University.
Address: GPO Box U1987, Perth, Western Australia, 6845
Email: A.Bona(at)curtin.edu.au
Phone: +618-9266-7194
Web: <https://staffportal.curtin.edu.au/staff/profile/view/andrej-bona-14bc850b/>
- **Dr. Alireza Malehmir**
Professor, Controlled-Source Seismology, Uppsala University.
Address: Villavagen 16, SE-75236 Uppsala, Sweden
Phone: +46-18-4712335
Email: Alireza.Malehmir(at)geo.uu.se
Web: <http://katalog.uu.se/empinfo/?id=N3-1060>
- **Dr. Majid Nabi-Bidhendi**
Professor, Institute of Geophysics, University of Tehran
Address: Institute of Geophysics, End of North Karegar Ave., Tehran, Iran
P.O.Box 14155-6466, 1435944411, Tehran, Iran
Phone: +98 21 - 61118224
Email: mnbhendi(at)ut.ac.ir
Web: <https://geophysics.ut.ac.ir/en/~mnbhendi>
- **Dr. Khosrow Hassani**
Assistant Professor, Department of Physics, University of Tehran
Address: Room 322, Department of Physics, North Kargar Ave., P.O.Box 14399 / 547, 1439955961, Tehran, Iran
Phone: +98 21 - 61118630
Email: hassanikh(at)ut.ac.ir
Web: <http://physics.ut.ac.ir/~hassani/>