

# YUANDI GAN

Cell Phone: (832)540-8045

Email: gan.yuandi@gmail.com

Address: 4444 Cullen Blvd, Houston, Apt. 615, Houston, TX 77004

## EDUCATION

### Doctor of Philosophy: Geophysics

*August 2018*

University of Houston - Houston, Texas

GPA: 3.646

### Master of Science: Geophysics

*December 2014*

University of Houston - Houston, Texas

GPA: 3.534

### Bachelor of Science: Geophysics

*July 2012*

Chengdu University of Technology - Chengdu, Sichuan, China

## PUBLICATION

- Gan, Y., and E. M. Chesnokov, Effects of variations in fluid properties and fracture geometry on dispersion, anisotropy and reflection in media with planar fractures, *Geophysical Prospecting* (Accepted September 2, 2017, awaiting publication).

## INTERNSHIP EXPERIENCE

**Sichuan Xinyin Resource and Investment LLC** - Chengdu, Sichuan, China

*March 2012 – April 2012*

- Record cores obtained from boreholes to provide information for exploring gold ore.
- Survey landform using total station.
- Record distribution of different kinds of ores and underground geological structure in the mine laneway.

## RESEARCH EXPERIENCE

**Thesis of master**

*August 2013 – November 2014*

Effect of material contrast on anisotropy and dispersion of layered periodic medium

Content: We used numerical models to examine the behaviors of dispersion of P-wave phase velocity in the normal direction to layering and anisotropy of low-frequency phase and group velocities of fast and slow P-waves, under conditions of varied contrasts of bulk modulus, density, and thickness between the solid and fluid layers. We also used a numerical model which describes a layered periodic medium with alternating saturated porous layers and fluid layers to examine the effect of viscous interaction of fluids in randomly distributed and connected pores on the dispersion of P-wave velocity.

**Conference papers**

Wave propagation, reflection and transmission in tilt orthorhombic media. *17<sup>th</sup> International Workshop on Seismic Anisotropy*. Jackson School of Geosciences, The University of Texas at Austin.

## Dissertation of Ph.D. (Proposal)

Effects of fracture connectivity on dynamic attenuation in fractured porous media

Content: Connectivity of fractures is of significant importance in estimating permeability of fractured porous rocks. The behavior of frequency dependent attenuation of seismic waves propagating in fractured porous rocks with fluid saturation is affected by the connectivity of fractures. The main objectives are to discover the effect of fracture geometry on the frequency dependent attenuation, then trying to make a distinction between connected and disconnected fractures from frequency dependence of quality factor and synthetic seismograms of vertical seismic profiles. The results are helpful to estimate permeability of reservoirs by using seismic data in oil and gas production.

## PART-TIME WORK EXPERIENCE

**Learning Support Services at University of Houston** – Houston, Texas      *September 2014 – January 2017*

Position: tutor

Duty: Giving advice to undergraduate students in their study of mathematics, physics, and Chinese; helping them on homework of those disciplines.

## RELEVANT COURSEWORK

Seismic data processing	Direct hydrocarbon indicator	AVO
Tectonics	Rock Physics	Multicomponent seismic exploration
Micro-seismic exploration	Geophysics of Porous medium	Earth Physics

## SKILLS

### Computer Skills:

Programming: MATLAB, C, Fortran,

Computation: Maple, Wolfram Mathematica

Data processing and interpretation: Oasis montaj, IHS Kingdom

Typesetting: LaTeX

Operation System: Unix, Linux

## ACTIVITIES

The Vice-minister of Publicity Department of the Student's Union at Chengdu University of Technology (2009) - Chengdu, Sichuan, China