DANIEL C. ROCHA JR

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EDUCATION

Colorado School of Mines (CSM), Golden CO

Ph.D. in Geophysics — May 2018, GPA: 3.591

M.Sc. in Geophysics — November 2015, GPA: 3.524

1-year exchange program in Geophysics — January - December 2012, GPA: 3.725

Universidade Federal da Bahia (UFBA), Brazil

B.Sc. in Geophysics — March 2009 - April 2013, Average Grade: 87/100

QUALIFICATIONS

Geophysical	Seismic Processing/Interpretation, Geophysical Inversion and Petrophysics Lab
Computer Languages	C, C++, Fortran, Python, Latex, Bash (Linux Shell), Matlab
Geophysical Software	Madagascar, Seismic Unix, PROMAX, and others
Microsoft Software	Excel, Word, PowerPoint
Parallel Processing	OpenMP, MPI
Languages	Portuguese (Native), English (Fluent), Spanish (Basic)
Work Authorizaton	F1 Visa

ACADEMIC AND INDUSTRY EXPERIENCE

Research Assistant: Center for Wave Phenomena - CSM — August 2014 - Present (Golden, CO)

· Research interests: Full waveform inversion, seismic wavefield tomography and imaging, multicomponent seismic imaging; wave-equation migration velocity analysis

· Two research reports, two SEG abstracts and one EAGE abstract:
- Acoustic wavefield imaging using the energy norm.
- Isotropic elastic wavefield imaging using the energy norm.
- Anisotropic elastic wavefield imaging using the energy norm.

Geophysicist I: Petroleum Geo-Services (PGS) — July 2013 - July 2014 (Rio de Janeiro, Brazil)

· Quality control of seismic data, design of peer-reviewed workflows and parameter testing for
- Multiple attenuation (Surface Related Multiple Attenuation and Radon filtering)
- Trace regularization and data merging
- Denoise (Low cut, despike and swell denoise), and designature of source wavelet

· Utilized PGS custom software.

Lab Assistant: Center for Rock Abuse - CSM — May 2012 - August 2012 (Golden, CO)

· Performing experiments for P and S velocity estimation of shale rock samples inside a vessel under high pressure and temperature.

Research Assistant: UFBA — January 2010 - December 2011 (Salvador, Brazil)

· Research in mathematics: stochastic processes (2010)

· Research in seismic processing: ground-roll attenuation, deconvolution, seismic inversion and imaging (2011). Three SBGf (Brazilian Geophysical Society) abstracts:
- Seismic Deconvolution using an iterative Lp-norm method
- Non-linear inverson of interval velocities
- Using extended imaging conditions for filtering of cross-talk artifacts in migrated images