

# DANIEL C. ROCHA JR

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## EDUCATION

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### Colorado School of Mines (CSM), Golden CO

Ph.D. in Geophysics

May 2018, GPA: 3.591

M.Sc. in Geophysics

August 2014 - 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

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<b>Geophysical</b>	Seismic Imaging and Interpretation, Geophysical Inversion, Petrophysics, etc
<b>Computer Languages Software</b>	C, Python, Latex, Bash (Linux Shell), Matlab, C++, Fortran Madagascar, Seismic Unix, Seiswors, PROMAX, and others. Microsoft Office.
<b>High performance computing</b>	OpenMP, MPI, SBatch
<b>Languages</b>	Portuguese (Native), English (Fluent), Spanish (Basic)
<b>Work Authorizaton</b>	F1 Visa

## ACADEMIC AND INDUSTRY EXPERIENCE

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

Research interests: full waveform inversion, seismic wavefield tomography and imaging, multicomponent seismic imaging; microseismic monitoring

- 3 published and 2 submitted articles in the peer-reviewed journal *Geophysics*
- 6 research reports (available in <http://cwp.mines.edu/researchpublications/CWPpresearchreports.html>)
- 5 SEG (Society of Exploration Geophysicists) conference abstracts
- 1 EAGE (European Association of Geoscientists and Engineers) conference abstract.

**Geophysics Intern: Shell International Exploration and Production** Summer 2017 (Houston, Texas)

Seismic attenuation compensation with pre-stack data

- Synthetic tests to evaluate the contribution of mid- and far-offsets in estimating attenuation models
- Utilized Shell custom software.

**Geophysics Intern: Shell Exploration and Production Company** Summer 2016 (Houston, Texas)

Ocean Bottom Seismic (OBS) modeling benchmarking for optimal acquisition design

- Design of alternative acquisition surveys for illuminating an area of interest while reducing acquisition costs
- Utilized Shell custom software.

**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, despiking and swell denoise), and design of source wavelet
- Utilized PGS custom software.

**Lab Assistant: Center for Rock Abuse - CSM** Summer 2012 (Golden, Colorado)

Performed experiments with shale rock samples for reservoir characterization.

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

Research in applied mathematics and seismic data processing

- 3 SBGf (Brazilian Geophysical Society) conference abstracts.