
Objective

To acquire a full-time research position in the oil and gas industry in the field of exploration geophysics.

Education

- Graduation –May 2016 (expected) **PhD in Geophysics**, Colorado School of Mines, Golden, CO, USA.
Conducting research in retrieving the Green's function in the presence of the free surface and its applications to imaging
- May 2011 **MSc in Geophysics**, Texas A & M University, College Station, Tx, USA, GPA 4.0/4.0.
MSc thesis involves investigating borehole waves and its relationship to source. Modelling of these waves is done using finite difference algorithm. The thesis research should have applications to Ultra-deep water
- May 2008 **Petroleum Geosciences**, University Of The West Indies St. Augustine, Trinidad, (UWI), GPA 3.8/4.3.
Continued working on regional geologic interpretation to prospect evaluation offshore Trinidad (Columbus Basin) from my internship

Experience

- Aug. 2012– Present **Research Assistant**, Center for Wave Phenomena, Colorado School of Mines.
Conducting research with Dr. Roel Sneider on retrieving the Green's function and using this for imaging with primaries, internal multiples and free surface multiples
- Jan. – Feb. 2015 **Visiting Researcher**, Department of Geoscience and Engineering, Delft University of Technology, Netherlands.
Worked in the groups of Kees Wapenaar and Evert Slob on multidimensional Green's function retrieval as well as new techniques for imaging, retrieval and sensitivity of the Green's function
- Jun. – Aug. 2014 **Visiting Researcher**, Federal Institute for Materials Research and Testing, Berlin, Germany.
Applied Marchenko imaging to a slab of concrete
- Aug. – Dec. 2013 **Teaching Assistant**, Center for Wave Phenomena, Colorado School of Mines.
My role involved correcting the homework as well as providing help to the students. I also taught part of the course for six weeks (Wave equation in isotropic media, introduction to potentials, Lamé's theorem, derivation of the Green's function)
- Aug. 2011– Aug. 2013 **Research Assistant**, Center for Wave Phenomena, Colorado School of Mines.
Conducting research with Dr. Paul Sava on migration and inversion of diffractions
- Aug. 2008– Aug. 2009 **Geophysicist in the Graduate Development Program**, BGTT, BG Trinidad and Tobago.
 - *Constructed depth models using different approaches within the North Coast, Offshore Trinidad to investigate the relative accuracy of each model and suggest a suitable model for its application in the directional drilling phase within the basin*
 - *Developed a lead inventory for deep segments within the North Coast, Offshore Trinidad using Geoframe software, especially the new 3D application, Geoviz. Evaluated the deep hydrocarbon leads (Channels) into prospects to assess its commercial feasibility*

Aug. 2011– **Summer internship**, bpTT, Trinidad and Tobago.

- Present
- *Hydrocarbon prospect evaluation project- from Regional Geology and seismic interpretation to economics*
 - *Interpreted regional and sub-regional geology, performed seismic interpretation and volumetric analysis to cumulatively identify commercial prospects within the shallow reservoirs of the Columbus Basin (South-East, Offshore Trinidad)*

Jun. –Jul. 2006 **Summer Internship**, Powergen, Trinidad and Tobago.

Assisted in the design of a user friendly software, utilized by the Powergen engineers for inputs of plant processes. This interface was developed using HTML (Hyper Text Markup Language)

Publications

Singh, S., Snieder, R., Behura, J., van der Neut, J., Wapenaar, K., and Slob, E., 2015, Marchenko imaging: Imaging with primaries, internal multiples, and free-surface multiples: *Geophysics*, Vol. 80 (5), S165-S174.

S.Singh, R.Snieder, J.Behura, J.van Der Neut, K.Wapenaar, and E.Slob, 2014 Autofocusing imaging: Imaging with primaries, internal multiples and free-surface multiples: SEG Technical Program Expanded Abstracts: pp. 4060-4065.

S.Singh, R.Snieder, J.Behura, J.van Der Neut, K.Wapenaar, and E.Slob, 2014, Autofocusing for Retrieving the Green's Function in the Presence of a Free Surface: 76th EAGE Conference and Exhibition.

Research interests

- Imaging
- Inverse scattering
- Green's function retrieval
- Diffractions

CERTIFICATIONS/TRAINING

- Certificate in General Industry 29 CFR 1910 Safety and Health course
- Training in Landmark® and Geoframe (UWI)

Computational Skills

- Landmark and Geoframe
- Programing: Fortran, C, Python, Matlab
- Madagascar

AWARDS

2014– present **Awarded a ConocoPhillips Scholarship.**

2012-2013 **Social Chair for Society of Graduate Geophysics Students.**

2011 **Awarded the John M. Poate Young Investigator Fellowship.**

2010- Present **Awarded a ConocoPhillips SPIRIT Scholarship.**

Co-Chair of the ConocoPhillips SPIRIT Scholars Board (Texas A&M Univ.).

2008 **Awarded a Fulbright Scholarship.**

2005 **National Additional Scholarship for Advanced Level Performance.**
(Top Six in the Science & Mathematics category for GCE in Trinidad and Tobago)