UNIVERSITY of HOUSTON

ALLIED GEOPHYSICAL LABORATORIES

Student Name: Iris Haihong Wang

Degree and Year: PhD in Geophysics (1st Year)

Research Interests: Multicomponent seismic, data analytics/data science, rockphysics, microseismic

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I am an accomplished and dynamic professional with more than 20 years of global experience in geophysics and geomodeling for exploration and development within the oil industry. I demonstrate broad-based and multi-disciplinary technical skills and apply cutting-edge technology to meet the evolving business requirements of high-profile oil and gas companies. As an energetic leader, I thrive in collaborative, team-oriented environments yet work independently with equal success. My key technical abilities:

>> 15+ years of experience in quantitative interpretation of seismic data (forward modeling, AVO analysis, post-stack/prestack seismic inversion, post-stack/prestack geostatistical inversion.)

>> Technically proficient “power user” with in-depth use of Petrel and Jason Geoscience Workbench; solid experience in Hampson Russell, Transform and Kingdom Suite (SMT) software.

>> Highly skilled in unconventional reservoir characterization including tight oil and gas reservoirs; significant experience in the Permian Basin, Bakken-Three Forks, Powder River Basin, and the Eagle Ford formations.

>> Completes integration of petrophysics, rock physics, geology, geophysics, and reservoir engineering to accurately characterize subsurface reservoir properties and volumetrics driving economics.

>> Expansive experience in implementing and performing seismic to simulation integrated workflows to develop dynamic models aligned with field history production.

I began to discover an interest in data analytics/data science during working for oil and gas operators. The oil industry has been talking about “big data” for long time. Indeed, the processes and data acquisition related oil and gas exploration, development, completion design, production generate humongous amount of data. Great power and breakthrough insights can be found in “big data analytics”. The oil industry is behind of the other major technology providers (e.g., GE, Microsoft, etc.) in that regard. Majors have spent billions to enter the “big data analytics”, while the oil industry is seen as a starter for it. I consider myself as a geoscientist who has statistics, mathematics, problem-solving and professional expertise. Those skill sets are the key skills needed to be a competent data scientist. I have been learning the cutting-edge technologies and latest applications; I have rich experience in the conventional and unconventional plays for various basin settings; I knew the majority of pitfalls of the established technical inputs and outputs for data analytics; all of these make me an excellent Ph.D student for this type of study. I am enthusiastic about completing my Ph.D study at UofH.