Matthew Figueroa

Lead Geophysical Analyst

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Summary

A Mathematics graduate from the University of Texas at Austin skilled in numerical analysis and process optimization. Current focus includes designing both graphical interfaces as well as logic and specific algorithms for various topics to maximize deliverable content and minimize time requirements and potential for error. Work roles include being the developer in the Data Processing department with heavy emphasis on data visualization in addition to managing projects and personnel.

Experience

Geophysical Analyst, FairfieldNodal, Houston, TX 01/2015 -

Apply geophysical principles surrounding ocean bottom seismic processing. Complete tasks using proprietary seismic databasing and processing software on Linux workstations. Processing topics include orientation analysis, amplitude analysis, signal analysis, first-break positioning and clock performance analysis 08/2015

Senior Geophysical Analyst, FairfieldGeotechnologies, Houston, TX 08/2015 -

Additional responsibilities from **Geophysical Analyst** include liaising with clients, managing the work of a team of analysts, and providing feedback to the lead analyst 01/2016

Lead Geophysical Analyst, MagseisFairfield, Houston, TX

Additional responsibilities from **Senior Geophysical Analyst** include managing long-term projects, training and managing all analyst personnel, designing and implementing workflows per client request, designing and implementing programs and scripts to be used across different departments, and providing technical support to analyst personnel across all projects. 01/2016 - Current

Education

B.S, Mathematics, The University of Texas at Austin 05/2011 - 12/2014

Degree path focused on numerical analysis with multiples years of included work designing optimization algorithms for physics laboratories at the TACC

Skills

- Proficient in Python, Linux, Bash, LaTeX
  - Regularly used Python packages include NumPy, SciPy, Matplotlib, OS
- Prior experience with MATLAB and C++ (OpenMP)
- Algorithm development
- Signal processing
- Seismic data visualization

Recent Scripting Projects

- Automatic report generation
- Interactive orientation analysis (headers or data)
- Interactive diagnostic QC tool
- Interactive clock analysis suite including pattern identification, visualization, and iterative correction