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**Project Data Scientist**

**Expertise** Predictive Modeling, Advanced Analytics Dashboarding

**Education** Data Science Immersive Program, 2020  
Galvanize, Denver, Colorado, USA

P.S.M. (Geology), 2017  
University of Northern Colorado, Greeley, Colorado, USA

B.S. (Geology), 2015  
University of Northern Colorado, Greeley, Colorado, USA

**Professional Experience**

- 2024 – Present ITASCA Denver, Lakewood, Colorado  
Project Data Scientist
- 2023 – 2024 Arvada Rent-Alls, Arvada, Colorado  
Advanced Analytics Consultant
- 2022 – 2023 Driven Brands, Charlotte, North Carolina  
Data Scientist
- 2020 – 2022 Plutoshift, Denver, Colorado  
Data Scientist
- 2017 – 2019 Chesapeake Energy, Powder River Basin, Oklahoma City, Oklahoma  
Exploration & Development Geologist

**Project Experience**

**Drilling Mud Loss Project:** Organized and led a multidisciplinary group to investigate, anticipate, and mitigate mud losses in a structurally complex, high-priority, and fast-paced drilling program. Pioneered an innovative new approach using SQL, Spotfire, and Geographix to analyze a large volume of real-time drilling data, resulting in a highly granular predictive model relating geologic properties to drilling losses. The project improved business unit drilling practices by reducing drilling time in both the intermediate and lateral portions of the well and is projected to lower costs by up to \$14.7 million annually.

**Parkman Formation Analysis:** Primary geologist on a multidisciplinary exploration project to assess the upside potential of deeper pay zones across a large core acreage position. Supervised core acquisition and helped conduct a low-temperature hydrous pyrolysis analysis. Incorporated new seismic interpretations into structure and stratigraphic maps to define resource potential. Created a full suite of petrophysical maps to further refine new prospective zones within acreage position.

**Predictive Revenue Model Utilizing Weather Data:** Developed and deployed an Accuweather-based weather model, providing daily and site-level scoring and 14-day forecasts, with a 99% accuracy rate for the first 3 forecasted days, resulting in improved decision-making. Pioneered the implementation of advanced analytics models (weather models) in production using Google Vertex. Spearheaded discussions for the creation of similar

## **Alice E. Heesacker – ITASCA Denver**

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weather models for Driven Brands' International, Glass, and Take 5 Oil Change divisions. Collaborated with Business Intelligence (BI) to create an interactive and business-friendly weather model dashboard.

Dow Chemical Wastewater Treatment Optimization Project: Delivered 23% savings year over year on chemical cost for Dow Chemical through suite of predictive models for wastewater treatment facility to reduce chemical application while maintaining high standards for environmental compliance.