KAREN N. BLACK

(803)210-7425 ⋄ karenb2987@gmail.com ⋄ linkedin.com/karen-n-black/ ⋄ github.com/karenblack

EDUCATION

B.S. Computer Science   **Expected May 2022**
Oregon State University   GPA: 4.0

M.S. Geological Sciences   **May 2012**
The University of Texas at Austin   GPA: 3.8

B.S. Geological Sciences   **May 2010**
College of Charleston   GPA: 3.8

PROJECTS

Black Box Board Game | Python   https://github.com/karenblack/Black-Box-Game.git

- Logic and strategy game Black Box with GUI implemented in PyGame. The player must use logic to decipher ray paths and determine unknown atom locations within a 'black box' before points run out.
- Program initializes game and game board classes which creates a game board with random atom placement, calculates ray paths, tracks ray entry/exit locations, updates player score, and validates player atom guesses.

Space Invaders | Python   https://github.com/karenblack/Space-Invaders.git

- Single-player version of the arcade game Space Invaders with GUI graphics and sounds executed in PyGame. Game initializes with enemy targets at random locations. Enemy constantly re-spawns in random locations until a collision with player spaceship ends the game.

EXPERIENCE

Senior Geologist - Integration Specialist   April 2013 - Present
Core Laboratories | Petroleum Services   *Houston, TX*

- Advise clients during acquisition, appraisal, exploration, development, and production of oil and gas wells through team-focused multidisciplinary projects.
- Identify under-optimized production and characterize potential exploration and development targets by integrating reservoir geology, petrophysical well log, rock core analysis, and completion/production data sets.
- Notable Project: Utilized R for principle component analysis (PCA) and K-nearest neighbor cluster analysis of high-resolution X-ray fluorescence data in multiple oil and gas wells across Texas and Louisiana. Visualized and interpreted results utilizing Spotfire for oral presentation at industry consortia symposium.

TECHNICAL SKILLS

Python, Spotfire, R, Pycharm, Git, C++ (beginner)

VOLUNTEER EXPERIENCE

- Geology Board of Advocates - *Philanthropy Co-chair*   2019 - Present
- Science and Engineering Fair of Houston - *Placement Award Judge*   2017 - Present