Graphic logs are the most common way of characterizing sedimentary geologic rock formations in outcrop and core data (Fig. 1). The term graphic log originates from a geologist measuring and drawing graphically, or ‘logging’, a cored or outcropping stratigraphic section. Graphic logs generally have thickness/depth on the y axis, and grain size on the x axis (Fig. 1). Many geologists spend weeks in the field carefully measuring and logging rock formations at fine-scale in an analog, hand-drawn manner. The fine-scale thickness and grain-size data that may have taken days or weeks to collect is often never captured digitally in a tabular format that can be analyzed. So, while tens of thousands of meters of graphic logs measured at fine-scale exist to quantify various geological parameters, the data contained in the graphic logs is rarely digitized and available for use.
While software solutions exist to collect graphic log data in the field (e.g., http://lithohero.com/), there are thousands of hand-drawn logs that need to be digitized. This project aims to create a webapp (based on an existing, but clunky Matlab GUI) where a geologist can manually (or in semi-automated fashion) digitize the rock layers from a hand-drawn graphic log. We hope that the open-source release of this webapp will spur the collection of quantified, structured, and comparable data that, with continued advances in the accessibility of machine-learning to geologists, will lead to new discoveries in sedimentary geology.

Current Matlab GUI that is messy and buggy. A webapp would be much better, with flexible digitization options and I/O functionality with existing plotting routines (e.g., https://github.com/agile-geoscience/striplog)