



Mines Orderly Field Session Request - Attestation Portal and Data Pipeline

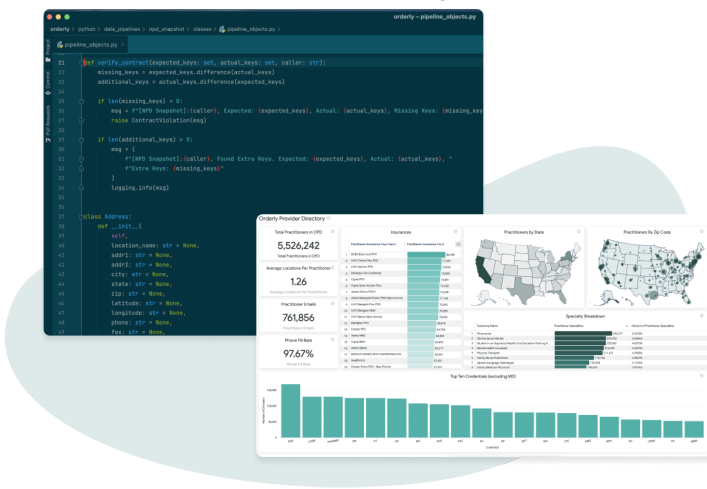
Company Background

Have you struggled to find a new doctor? Been confused where that doctor sees patients on Tuesday afternoon? Wondered whether a doctor is "In Network" or accepting new patients? Accurate provider data is crucial to nearly every interaction in healthcare, yet the best tools for connecting you with doctors contain errors about 50% of the time. This disconnect results from the massive burden of managing provider data throughout the industry, causes billions of dollars in excess costs, and creates a huge barrier to accessing the care we all need.

At Orderly Health, we're solving the problem of inadequate healthcare provider data by creating THE trusted platform for all provider data interactions. We've compiled one of the largest repositories of provider data in the world, layered on a series of machine learning algorithms and processing pipelines to continually improve the data, and then made it API accessible to support any number of use cases that our customers might require.

What Twilio is doing for communication, or Plaid is doing for finance, Orderly is doing for healthcare, and we'd love your help building toward this vision.

For more information: <https://orderlyhealth.com/meet-orderly/>



Project Description

As part of Orderly's quest to improve healthcare provider data quality, Orderly is constantly developing new methods for sorting the signal from the noise in this data. These methods involve heuristics, ML models, identity resolution, and a host of other processes. But what many of these methods all have in common is the need for labeled training data, and what they all have in common is the need for a "ground truth" to assess their efficacy and run experiments. To that end Orderly uses phone attestation to establish a "ground truth" and confirm data points, and there's quite a bit of room for improvement in tooling for this process. Phone attestation, in short, is someone picking up the phone and actually calling a provider (doctors office, hospital, mental health clinic, etc) to confirm practitioner information and if incorrect, get the right information.

Mines students will (with support) as part of their project look at the existing process for creating attestation sample sets, guiding users through calls and recording the resulting labeled data, and making it available to internal Data Science and engineering teams for incorporation into machine learning models, Data Pipelines, etc. They will have an opportunity to completely redesign this process through implementing a greenfield software application, incorporating requirements and feedback from our Data Science and product teams.

While Mines students at the beginning of the project will have a chance to focus efforts on their area of interest, the project scope generally includes:

- Software workflow and UI to guide attestation callers and record results
 - Multiple workflow branching points to guide the callers through and make sure correct data is recorded
- Rules engine and queries to select appropriate records for attestation from a global population
- Creation of "attested data set" by the application to be used by Data Science team and other products in an accessible format

Team and Skills

- Looking for a team of 3-5 students, plenty of work to go around and scope can be adjusted to final team size.
- Skills involved: Not all of these are required to be known by students going in, but they will be touching on and learning many of these
 - Web UI Dev (javascript, react)
 - API backend dev (Python/Flask)
 - Data Engineer skills
 - SQL
 - GCP big-data tools like BigQuery, GCP Pub/Sub
 - Batched data processing, pub/sub communication

- While exact details are to be determined, Orderly is generally open to follow-on internships for interested students
- Location for Work
 - Orderly is a remote-first company, and work will primarily be remote
 - That said, Orderly has a strong (½ the company!) Denver area presence, including our project supervisor who's a Mines alumnus! Students are welcome to work in our small Denver office as they desire, and are strongly encouraged to do so for project kickoff

Details and Policies

- Students will be asked to sign a non-disclosure agreement (NDA) as part of the project. This is to cover any proprietary and/or private healthcare provider information and Orderly methodologies encountered during the course of the project. Students may share about the project itself for academic purposes.
- Students will be asked to assign intellectual property rights to Orderly for code artifacts. They may share their work with other students or Mines faculty for academic purposes.

Contact Information

Project Supervisor: Mark Barkmeier - mark@orderlyhealth.com

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