Rebecca Lovering

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EDUCATION

City University of New York, The Graduate Center, New York, NY - 2016
M.A., Computational Linguistics
University of Chicago, Chicago, IL – 2009
B.A., Linguistics
B.A., Political Science

EXPERIENCE

UPSTACK Inc.

September 2022 — November 2023

Director | Principal Data Engineer

- Architect and implement permanent replacement for prototype data warehouse and analytics apparatus (RDS Postgres, AWS Lambda, FiveTran, dbt, Tableau), communicating changes and practices to Tech Org, bringing institutional knowledge in-house and distributing it, more than doubling available dev resources with appropriate context.
- Direct integration of new data sources, tripling available business data in the data warehouse within 4 months of hire.
- Architected and implemented configurable automated system and process for intake, translation, and delivery of acquired business data to Salesforce (SQL and Python), reducing data integration time from approximately one hour of manual time per target data concept to 10 minutes of machine wall time for all concepts.
- Established and implemented standards for infrastructure as imposed on data warehouse and analytics apparatus in keeping with preferred industry practice (AWS, Terraform).
- Set coding standards and implemented automated systems for their support and enforcement (Makefiles, GitHub actions, pre-commit hooks, dbt tests)
- Founded and managed team of engineers and analysts, resourcing efforts for tech, operational, and product stakeholders, advocating for reports' learning opportunities, and developing processes (developmental curriculum, tech ladder) for management.

Particle Health, Inc.

August 2021 — August 2022

Data Engineering Lead

- Architected and implemented self-serve custom data delivery system: configurable tooling for intake, curation, and delivery of medical record data (Golang and Python). Drove processes and structures to ensure progress in the face of ambiguity. Designed and implemented viable proprietary model of medical concepts for curation targets and data exploration. Implemented infrastructure configuration within existing ecosystem (GCP, Terraform).
- Served as founding tech lead for the Information Security Working Group; coordinated efficient turnaround on individual customer security questionnaires, wrote policy docs, coordinated and contributed to engineering-side information gathering and remediation work for HITRUST

- certification by executing or managing execution of controls by fellow engineers, interfacing with HITRUST readiness consultancy.
- Automated business-continuity-dependent reporting to national medical data networks (Golang, SQL) into an extensible reporting apparatus for other slow-cadence reporting and ETL operations.
- Managed team of data engineers, resourcing efforts for tech, operational, and product stakeholders, advocating for reports' learning opportunities, and developing processes (developmental curriculum, cross-functional mentorship) for management.
- Set coding standards and implement automated systems for their support and enforcement (Makefiles, GitHub actions, pre-commit hooks)
- Participated in hiring efforts for multiple engineering roles, from role definition through final onsite; participate as architectural interviewer and code exercise reviewer.

Graphika 2019 — 2021

Principal Data Engineer

- Architected and implemented ground-up, containerized microlith replacement of core mapping engine monolith
- Architected and implemented ground-up, containerized replacement of core data pipelines for collection, structured data parsing, unstructured data parsing, and data loading
- Managed Platform Team of Data Engineers, resourcing efforts for tech, analytics, and science stakeholders, advocating for reports' learning opportunities, and developing processes (multifaceted review, developmental curriculum, cross-functional mentorship) for management.
- Collaborated with Ops to develop and communicate roadmaps to deliverables, ensuring stakeholder awareness and clear acceptance criteria for developers.
- Consulted on, designed, and implemented data pipelines for NLP efforts (topic modeling, sentiment analysis and stance detection, e.g.)
- Set coding standards and implement automated systems for their enforcement (linting/formatting, typing and type coverage 90%+, testing and test coverage 70%+).
- Led hiring efforts for Data Engineers, from role definition through final onsite; participated as architectural interviewer and code exercise reviewer for hiring other tech and science roles.
- Designed and delivered executive comms courses, actively participate in ongoing organizational process improvement.

Octopart 2018 — 2019

Data Analytics

- Developed data modeling and monitoring for product and industry concepts, using these tools for analysis (ad hoc and ongoing).
- Performed deep-dive analyses through both the engineering and monitoring stacks and realworld data sets to diagnose underlying causes of trends.
- Collaborated with Product to define KPIs, prioritized and strategized around meeting them.
- Designed and improved data quality measures and data architecture per best practices.
- Engineered and deployed a Data Science Environment (DSE) for more advanced data science tasks (prediction, clustering, e.g.), integrated with a pipeline for stakeholder access to results through BI tool.

Case Commons
Data Science and Policy

PUBLICATIONS

Event Parsing in Narrative: the Trials and Tribulations of Archaic English Fairy Tales, CUNY Academic Works (2016), available through http://academicworks.cuny.edu/gc_etds/1306/ Essential Sounds in International English: Taking Off the Silly Hats, 7th Edition, Communication Patterns, Rowayton, CT (2014)

SKILLS

Developmental Concepts: cloud infrastructure, CI/CD, containerization, orchestration, Agile development, version control

Programming Languages:

- Python (pandas, scikit-learn, jupyter)
- SQL (Postgres preferred dialect)
- Golang
- Terraform
- Docker

- bash/zsh (shell scripting)
- read Java, Javascript, and Ruby
- happy to learn others!

Tools:

Cloud Providers: GCP, AWS

Process Management: GitHub (git), JIRA, Pivotal Tracker, Shortcut, Trello, Figma, LucidChart,

LucidSpark, stickies.io

Analytics: Looker, Google Analytics, Google Data Studio, Tableau

Industry: Salesforce

Data: data modeling, data cleaning (including HIPAA-compliant anonymization and brand-sensitive sanitation), data wrangling, annotation, database design/management, data architecture, graph databases

Natural Languages: Spanish (advanced/fluent, read/write/speak); French (advanced/fluent, read/write/speak); German (intermediate, read/write/speak); Korean (beginner, read/write/speak); Mandarin (rusty intermediate, speak/read)