

GREG HILSTON

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TECHNICAL

Languages	Python Typescript/Javascript/Node Bash Java Golang SQL
Technologies	Docker Terraform Git AWS GCP Airflow Grafana Snowflake MLflow RAG MCP
Concepts	Software Engineering Cloud Architecture Data Engineering Machine Learning Backend Development

EMPLOYMENT

Sunrun | Senior Software Engineer | *Remote* April 2022 - Present

- Lead the "Grid Services" team, managing 140,000+ solar/battery sites nationwide for optimized energy export (*Javascript, GCP, Python, AWS, Airflow*)
- Built an AI-powered chat interface for easy access to the corporate knowledge base (*Python, AWS Bedrock, RAG, MCP*)
- Resolved multiple P0 outage resolutions, including a major billing incident, with \$1M daily revenue impact (*GCP, AWS*)
- Developed code to migrate 691 TB of data from Big Table, saving \$100k+ monthly (*Java, Apache Beam, GCP*)
- Architected team's Observability Stack with a custom library, metrics, dashboards, and run books (*Javascript, GCP, Grafana*)
- Mentored engineers through pair programming, thorough pull request reviews, and architectural guidance
- Served as head technical interviewer, evaluating candidates through coding challenges and system design exercises

Mosaic Data Science | Senior Data Scientist | *Remote* June 2021 - March 2022

- Explored companion animal metrics' relation to various health ailments and built out a corresponding data pipeline (*Python, Pandas, Matplotlib, Scikit Learn, Prophet*)
- Designed a computer vision tool to automate a car wash's tracking of vehicles, which alleviated human operators' responsibilities (*Python, YOLO, Docker, and AWS*)
- Optimized model inference performance by a factor of 43x (from 5 minutes to 7 seconds) while reducing monthly infrastructure costs by over \$2,000 monthly (*Docker, Serverless Framework, and AWS*)

Hop Labs | Machine Learning Engineer | *Remote* May 2020 - June 2021

- Improved a popular meal delivery service's recommendation algorithm to leverage user-to-user and item-to-item data (*Python*)
- Productionalized data pipelines that processed images in real time (*Python, ZeroMQ*)
- Engineered cloud infrastructure for the data science team (*Metaflow, Terraform, AWS SageMaker, S3, RDS, Step Functions*)

Madwire | Data Scientist | Previously Software Engineer | *Fort Collins, CO* October 2016 - May 2020

- Built a 1st party Customer Data Platform that can process over 150,000 daily web events and analyzed Google Ads performance metrics such as ROI (*GCP PubSub, Cloud Functions, Cloud Spanner, Cloud BigTable*)
- Automated the classification of more than 60% of business's verticals and mapping to 3rd party categories (NAICS, SIC, etc.) through the use of ML (*Python, spaCy, Gensim, Sklearn, Keras*)
- Extracted summaries from user reviews to improve SEO (*Python, Flask, TF-IDF, Page Rank algorithm*)
- Developed a scalable service to clean and parse user-inputted business hours (*Python, Ray*)

Front Range Community College | Adjunct Professor (Computer Science) | *Fort Collins, CO* Fall 2019

BAE Systems, Inc. | Leadership Program: Software Engineer | *Merrimack, NH* June 2012 - September 2016

EDUCATION

Johns Hopkins University December 2018

Master of Science, Computer Science, *magna cum laude*

University of New Hampshire May 2015

Bachelor of Science, Computer Science, *cum laude*

OPEN SOURCE CONTRIBUTIONS

Send2Ereader github.com/daniel-j/send2ereader/pull/17

Dockerized a convenient web application for wirelessly sending ebooks to ereaders (*Docker*)

Metaflow github.com/Netflix/metaflow-tools/pull/26

Implemented feature parity of Metaflow's AWS CloudFormation stack (*Terraform*)

Simple Slack Bot github.com/GregHilston/Simple-Slack-Bot

Developed a framework to make the development of Slack bots simpler (*Python, requests, websocket*)

INTERESTS

Blogging | Reading | Home Servers/Self Hosting | Baking | LLMs | NixOS | Board/PC Games | Paintball/Airsoft | Teaching