

# JAY NAPOLITANO

*Product Engineer*

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## PROFESSIONAL PROFILE

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Product and data engineer building full-stack internal tools, analytics systems, AI-assisted workflows, registry data platforms, and public product surfaces. Experience spans product discovery, UX review, frontend and backend implementation, API integration, data modeling, cloud infrastructure, evidence-backed research workflows, and operational reporting.

## CORE COMPETENCIES

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- Full-stack product engineering
- Product discovery and stakeholder research
- UX design review and workflow simplification
- React, Next.js, TypeScript, Python, Flask, FastAPI
- REST APIs, Looker API, Microsoft Graph API
- Snowflake, BigQuery, Postgres, SQL, data modeling
- Azure Functions, Azure Data Factory, Azure Blob Storage
- GCP Cloud Functions, cloud data pipelines, CLI workflows
- RAG, Azure AI Search, OCR, LLM-assisted tooling
- Analytics, experimentation, reporting governance

## PROFESSIONAL EXPERIENCE

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### Data Engineer

Aug 2025 - Present

*AdventHealth*

- Develops a metadata-driven registry platform that ingests clinical quality files from SharePoint into Azure Blob Storage, preprocesses them, stages them to Snowflake, and models bronze, silver, and gold layers.
- Supports registry sources including NCDR, STS, AHA Get With The Guidelines, ELSO ECMO, VQI, and related cardiopulmonary quality data.
- Builds validation, lineage, audit, schema-drift, file-parity, row-parity, null-check, cardinality, and reconciliation workflows for data engineers, architects, analysts, and institute stakeholders.
- Creates Streamlit review tools, metadata manifests, schema documentation, Snowflake SQL models, UDFs, and local CLI workflows for controlled review and release.

### Analytics Engineer

Apr 2022 - Apr 2024

*Penske Media Corporation*

- Helped build Omnilytics, a Next.js executive analytics surface that centralized curated Looker reporting for C-suite, SVPs, editors, and senior analysts across Penske brands.
- Built and maintained Azure-hosted RAG and ChatGPT-style editorial tooling with a Next.js frontend, Flask API backend, Cosmos DB, Azure AI Search, OCR, Microsoft Graph API, and Bicep deployment scripts.
- Built audience and advertising pipelines using Treasure Data, BigQuery, Snowflake, GCP Cloud Functions, Google Analytics, Piano, Google Search Console, vendor APIs, Python, SQL, and Go.
- Interviewed editors, analysts, department heads, SVPs, the COO, and the CTO to identify workflow pain, prototype internal tools, QA dashboards, and simplify reporting and data products.

### Data Products and Automation

Jan 2020 - Apr 2022

*BTJN*

- Collected public web data, normalized it into market-specific datasets, enriched records, and delivered lead lists and automated CSV reports for clients.
- Built reusable Python, SQL, Postgres, browser automation, Google Sheets API, GCP, and cron-driven pipelines with logging for repeated delivery.
- Translated one-off client requests into algorithmic processes reused across similar markets and reporting needs.

## SELECTED PROJECTS

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**JaySearch.** Empirical research workflow for planning, retrieval, scoring, synthesis, and source-backed technical decisions. [justin-napolitano.github.io/jaysearch/](https://justin-napolitano.github.io/jaysearch/)

**News Reader.** Reader for grouping sources, reducing noise, and turning current news into reviewable signal. [news.selectproj.com](https://news.selectproj.com)

**Clinical Registry Data Platform.** Metadata-driven registry platform for clinical quality ingestion, validation, lineage, Snowflake modeling, and governed reporting.

**Public GitHub Work.** Public repositories, project pages, and visible build work. [github.com/justin-napolitano](https://github.com/justin-napolitano)

## EDUCATION

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**BA, Political Science.** University of Central Florida, August 2017.

**Language.** Full professional fluency in English.