

Matt Boegner

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OVERVIEW: Lead AI engineer and architect with deep data engineering expertise and a proven record of guiding teams through complex technical implementations

WORK EXPERIENCE

Silectis

Director, Data Architecture & AI

January 2023-Present

Data Architect

August 2020-January 2023

Data Engineer

July 2019-August 2020

Architecting end-to-end migrations, GenAI applications, and production-ready pipelines through hands-on development and technical oversight of engineering teams

- *Production Engineering:* Deployed an autonomous diagnostic agent to triage failures across all client environments, utilizing error-pattern clustering and automated fix generation to reduce resolution time by >80%
- *Reusable AI Frameworks:* Engineered modular Python libraries for RAG, Text-to-SQL, and prompt orchestration to standardize GenAI deployments across client environments
- *Feature Development:* Shipped popular GenAI-enabled features including an automated data catalog, an automated PII/DSAR search, and an enhanced data validation suite
- *Multimodal GenAI Applications:* Delivered an automated matching engine for online marketplaces, integrating text, text-to-speech, and vision-based extraction with semantic search to drive listing accuracy and discovery
- *Client Delivery:* Primary data engineer on 15+ M&A integrations, including sole data migration owner for \$20M+ implementation
- *Client Leadership:* Providing technical oversight for a diverse portfolio of clients, from early-stage to multinational, in industries such as manufacturing, SaaS, media, and logistics

Flexion

Freelance Consultant - Senior Data Engineer

November 2018-June 2019

Developed an end-to-end data warehouse implementation in the healthcare industry

- *Infrastructure & Orchestration:* Designed a data warehouse on AWS Redshift, utilizing Python and Apache Airflow

Upside Travel

Lead Data Engineer

March 2018-September 2018

Data Engineer

June 2017-March 2018

Led the data engineering team for a startup travel company, integrating airline, hotel, website, mobile app, and marketing data streams

- *Client Delivery:* Migrated Upside's data warehouse from Redshift to Snowflake Computing in less than two weeks, saving over \$20,000 per month while improving system performance
- *Data Architecture:* Served as the company's primary data architect, embedded with data science to facilitate A/B testing, and refactored production databases to increase speed of feature development

Deloitte Consulting

ETL Developer

September 2014-November 2016

Developed custom ETL and BI tools for a large-scale data warehouse implementation in the manufacturing industry

EDUCATION

University of Virginia, School of Engineering and Applied Science

Major: Systems & Information Engineering --- Minors: Engineering Business; Global Sustainability

- President - International Council on Systems Engineering at U.Va. (INCOSE)
- Founder of Zero-Waste Athletics, a multi-year sustainability initiative with over 17,500 total attendees

SKILLS & EXPERTISE

Data Engineering & Infrastructure: ETL/ELT Pipelines, Apache Spark, Apache Airflow, Snowflake, Databricks, Amazon Redshift, Google BigQuery, SQL, Python, System Design, REST APIs, CRM, ERP, Terraform, CICD, Data Modeling, Data Validation, Data Quality, Data Governance, PII Masking, AWS, Google Cloud Platform (GCP), Microsoft Azure

Artificial Intelligence & Machine Learning: Large Language Models (LLMs), Generative AI (GenAI), Retrieval-Augmented Generation (RAG), Agentic Frameworks, LangChain, LlamaIndex, Vector Databases (Pinecone, Weaviate, pgvector), Prompt Engineering, Semantic Search, Hugging Face, OpenAI, Anthropic, Gemini