

DATA & SOLUTIONS ARCHITECT

PROFESSIONAL SUMMARY

A broad data generalist with deep experience operating at the intersection of analytics, data engineering, and enterprise architecture. Proven track record of enabling scalable analytics ecosystems by translating ambiguous business needs into well-structured data models, workflows, and platforms. Trusted partner to product, engineering, analytics, and leadership teams, with strengths in stakeholder alignment, governance, and system-level thinking. Experienced in working within large enterprises and fast-moving environments, contributing architectural guidance, modernizing data practices, and empowering analysts through reliable, self-service data leadership. Seeking senior analytics engineering or solutions-oriented roles where cross-functional influence, architectural clarity, and data-driven decision support are central to impact.

CORE COMPETENCIES

Analytics Engineering | Data Modeling | Cross-Functional Stakeholder Enablement | End-to-End Data Architecture | Systems Thinking | Enterprise Data Platform Adoption & Modernization | Data Governance | Quality Assurance & Standards | Advanced SQL | Analytical Query Design | Python for Analytics | Automation & Modeling | Semantic Layer & Metrics Design | Agile Delivery | Technical Program Execution | Business Acumen | Decision Support | Data Pipeline Design & Optimization | Technical Communication | Executive Translation | Mentorship & Technical Leadership

PROFESSIONAL EXPERIENCE

Senior Associate, Data Architect Analyst, Hilton, McLean, CA (remote) 11/2023 - Present

- Analyze and document complex enterprise and legacy data environments to surface modernization opportunities, architectural improvements, and system decommission paths supporting large-scale cost reduction efforts (\$M).
- Lead cross-functional discovery sessions and technical workshops with business stakeholders, vendors, architects, and engineering teams to translate business needs into viable data and platform designs.
- Support enterprise onboarding to the centralized data platform by coordinating closely with platform engineering, cloud operations, and security teams to enable compliant data access and management workflows.
- Embed across multiple (3-5) Agile delivery teams to align priorities, dependencies, and capacity planning with delivery leads, governance partners, and enterprise architecture stakeholders.
- Act as a trusted intermediary between technical and non-technical groups, ensuring shared understanding of architectural patterns, constraints, and long-term roadmap implications—the ability to work well with others as an essential high-level leader.

Staff Data Analyst – Tech Lead, Ads Umbrella, Doximity, San Francisco, CA (remote) 12/2022 - 04/2023

- Led analytical efforts supporting advertising strategy by evaluating product performance, sizing new placement opportunities, and addressing large-scale (TB sized) event tracking issues impacting ad delivery.
- Collaborated with product, business operations, and strategy partners to redesign data models (25% more accurate), formalize data contracts (e.g. Great Expectations), and align governance priorities across advertising initiatives.
- Designed and advanced a reusable optimization framework using counterfactual analysis to support what-if decision making across multiple advertising scenarios.
- Led a strong data culture through mentorship, technical education, and leadership of advanced research initiatives shared across the organization. Passionate about leading and developing others.
- Oversaw experimentation workflows and analytical standards to ensure consistency, reliability, and interpretability of insights delivered to senior stakeholders.

Senior Data Analyst – Tech Lead, Ads Growth, Doximity, San Francisco, CA (remote) 03/2022 - 12/2022

- Led the design and implementation of a data pipeline with contracts enabling automated control of dynamic advertising frequency logic within the platform (increased realized ad-value by \$29M/year).
- Supported long-term roadmap planning by contributing to data governance initiatives and guiding the transition from batch ELT workflows to streaming-based architectures.
- Re-architected core data models and pipelines to consolidate fragmented sources, resolve inconsistencies, and simplify downstream analytics and reporting.
- Partnered closely with engineering and product teams to support data requirements for newly launched advertising products.

ANDREW J. BIBIAN, MA

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DRIVE ANALYTICS & DATA ARCHITECTURE PROJECTS THROUGH PRIORITIZATION WORKFLOW

ALIGN THE GOAL → ASSESS THE DATA → DESIGN THE SOLUTION → BUILD & DELIVER → ENABLE & IMPROVE → ROI

PROFESSIONAL EXPERIENCE CONTINUED

Data Analyst - Technical Lead, Ads Prioritization, Doximity, San Francisco, CA (remote) 04/2020 - 03/2022

- Owned analytical support for the advertising prioritization system by conducting analyses, designing experiments, and maintaining production-grade data models.
- Implemented an optimal control solution to improve campaign pacing, engagement budgeting, and bidding strategies that drove significant revenue gains.
- Diagnosed and resolved production data issues affecting algorithm behavior and downstream reporting accuracy.
- Built internal knowledge-sharing programs, including a data book club, rotational learning initiatives, and technical talks focused on analytics and data strategy.
- Established internal data standards and reusable tooling that substantially improved metric pipeline performance and analytical efficiency (75% speedup).

Senior Data Scientist / Engineer, CredibleMind, Sausalito, CA (remote) 09/2018 - 04/2020

- Built the company's foundational analytics and reporting systems to support a mental health content aggregation platform and editorial decision-making.
- Designed and deployed (>50) scalable data pipelines using Python, AWS, serverless architectures, and external APIs to automate content ingestion and processing.
- Developed machine learning models to automate content tagging and classification, including training a deep learning text classifier via transfer learning and improving model precision by 30% from naive Bayes baseline.
- Integrated data workflows across engineering and product teams to support automated gap analysis and content recommendation capabilities.
- Contributed broadly across the data and engineering stack in a small startup environment, balancing analytical rigor with practical delivery constraints.

EDUCATION

Master of Arts in Ecology & Evolutionary Biology, Rice University

Bachelor of Science in Wildlife, Fish, and Conservation Biology, University of California, Davis

CERTIFICATES & COURSES

How to Solve It with Code – AnswerDotAI, Taught by Jeremy Howard, December 2025

Workshop on Scientific Use of Machine Learning on Low-Power Devices, Abdus Salam International Centre for Theoretical Physics (ICTP), April 2023

Deep Learning Part 1, Fast.ai, University of San Francisco, Taught by Jeremy Howard, May 2020

TECHNICAL SKILLS

Languages: Python, R, SQL, Bash

Programming Tools: AWS, Snowflake/Airflow/Looker, HEX, Git, Redshift, Mortar (internal dbt), Docker, CircleCI, Bamboo

Analytics: Bayesian Modeling, A/B Testing, Regression, Numerical Simulations, Random Forest, NLP

PUBLICATIONS & CONTRIBUTIONS

Bibian, A.J., J. A. Rudgers, and T. E. X. Miller. "The role of host demographic storage in the ecological dynamics of heritable symbionts." *The American Naturalist* 188.4 (2016): 446-459.

Compagnoni, A., Bibian, A.J., Ochocki, B.M., Rogers, H.S., Schultz, E.L., Sneck, M.E., Elderd, B.D., Iler, A.M., Inouye, D.W., Jacquemyn, H., and Miller, T.E., 2016. "The effect of demographic correlations on the stochastic population dynamics of perennial plants." *Ecological Monographs*, 86(4), pp.480-494.

Conrad, J. L., Bibian, A.J., Weinersmith, K.L., De Carion, D., Young, M.J., Crain, P., Hestir, E.L., Santos, M.J., Sih, A. "Novel Species Interactions in a Highly Modified Estuary: Association of Largemouth Bass with Brazilian Waterweed *Egeria densa*." *Transactions of the American Fisheries Society*. 145.2 (2016): 249-263

Contributions: Sih, A., A. Bibian, N. DiRenzo, X.X. Meng, P-O. Montiglio and K. Ringleman. 2012. On the benefits of studying mechanisms underlying behavior. 2013. P. Crowley, T. Zentall, eds., Comparative decision making. Oxford University Press.