

Ian Schillebeeckx

636.667.7425 | ianschillebeeckx@gmail.com | [linkedin.com/in/ianschillebeeckx](https://www.linkedin.com/in/ianschillebeeckx) | github.com/ianschillebeeckx

EDUCATION

Washington University in St. Louis

PhD, Computer Science (Computer Vision) – Fastest graduation in department history

St. Louis, MO

2012 – 2016

Saint Louis University

Honors BS, Computer Science

Honors BS, Applied Mathematics

St. Louis, MO

2007 – 2011

EXPERIENCE

VP of Enterprise Data Science and AI

January 2025 – Present

CareDx, Inc.

San Francisco, CA

- Established company's first Data Science function outside R&D; became go-to analytical partner to CEO, CFO, and COO for commercial business strategy across Commercial, Operations, and Billing
- Built commercial forecasting capability from scratch (~75% of revenue), reducing error from 6% to 0.9% across 3/6/12/24-month horizons; deployed Streamlit dashboard for C/VP-level stakeholder access with automated 90-day revalidation; integrated with CFO into quarterly/annual planning
- Built LLM agent scoring Target Product Profiles (TPPs) against rubric on market potential and technical feasibility, directly informing company's 5-year product roadmap and portfolio prioritization
- Directed development of predictive churn system for transplant centers covering \$270M revenue; replaced 6-month-lag detection with forward-looking model enabling proactive commercial intervention
- Drove 10% revenue increase through end-to-end analytics workflow: observational studies, feature engineering, predictive modeling, causal inference (DAGs, Causal Forests), and pre-post controlled analysis
- Pitched and secured \$1M for RAG-based literature review platform supporting Medical Affairs; directed LLM app producing 12 research manuscripts; drove AI transformation to 92% Copilot adoption (~750 employees)

VP of Data Science

January 2024 – January 2025

CareDx, Inc.

San Francisco, CA

- Led R&D Data Science organization (14 people, \$6M budget) spanning Bioinformatics, Statistics, and Data Science teams; reported to CSO with Board of Directors participation
- Oversaw BI portfolio of ~20 Tableau dashboards spanning Customer Ops, Sales, Manufacturing, and CLIA Lab; delivered operational and strategic reporting to cross-functional leadership
- Directed development of longitudinal patient journey model using LSTM to predict outcomes from sequential measurements (~1200 patients, ~5000 time points), outperforming traditional approaches; presented at international conference (top 10%)
- Directed development and validation of two production ML models (SVM, LASSO)

Head of Product and Data Science

December 2017 – January 2024

Cofactor Genomics

San Francisco, CA

- Led end-to-end launch of 2 ML-based diagnostic products in CAP/CLIA regulated environment; owned product strategy, ML development, clinical validation, and go-to-market
- Designed Market Access strategy achieving MolDX approval and Medicare reimbursement—enabling commercial access to largest US payer with limited precedent
- Conducted 30+ KOL and physician interviews to establish value proposition; translated insights into clinical, marketing, and access strategy
- Designed and powered multi-center clinical validation study (~500 subjects, 12+ sites) using CMH, Fisher Exact, and McNemar tests; achieved regulatory approval enabling commercial revenue
- First author on Nature ML paper (2nd most downloaded in 2022) and 3 AI patents

SELECTED PUBLICATIONS & PATENTS

3 Artificial Intelligence Patents – Methods for immune response prediction, cellular state determination, and data processing using AI/deconvolution

ML-based Biomarker for Immunotherapy Response – *Nature Scientific Reports*, 2022 (2nd most downloaded)

4 Computer Vision Publications – *CVPR, ECCV, ICCP, 3DV* (2014-2016)

TECHNICAL SKILLS

Analytics & BI: Forecasting, Scenario Modeling, Tableau, Streamlit, Databricks, AWS, Executive Dashboards

AI/ML: Predictive Modeling (LSTM, SVM, LASSO), Patient Journey Analytics, Causal Inference, LLM/RAG Applications

Commercial Analytics: Launch Analytics, Market Research, KOL Insights, Market Access Strategy, TPP Development

Languages: Python, R, SQL, MATLAB

Leadership: Team Building, Cross-Functional Collaboration, Executive Communication, OKRs, Product Roadmapping