**Adam Erler, Data Scientist**

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Summary

Data scientist with expertise in data analysis, predictive modeling, and machine learning, with a strong background in optimizing business processes through automation and data-driven decision-making. Adept at working with large datasets, building analytical models, and delivering insights to support strategic pricing and revenue optimization.

Experience

**GLAN** Remote

Data Scientist 04/23 - Present

* Collaborated with the research team to develop a machine learning tool that identifies connections between companies and human rights violations, slashing research time by 99%
* Developed a full-stack web application using Flask, integrating front-end and back-end components to deliver seamless user experience
* Implemented API integrations with large language models (LLMs) to enhance data extrapolation and uncover deeper business insights
* Developed a cross-document referencing tool using TF-IDF NLP techniques to improve information retrieval and document analysis efficiency
* Created a GIS mapping of incidents for visualization

**Education Strategy Consulting**  Remote

Data Analyst 06/2023 -Present

* Designed and managed a PostgreSQL database to store and process multi-state education data, optimizing query performance for advanced analytics and reporting
* Developed an automated API interface for programmatic Google searches, achieving an 80% reduction in workflow time for related tasks
* Identified inefficiencies in the data analysis process and redesigned workflows, significantly enhancing efficiency and consistency across multiple data sources
* Managed and streamlined project versioning by regularly updating and maintaining codebase using Git, ensuring seamless collaboration and project continuity
* Integrated state-level education data with NCES GIS datasets to create geospatial visualizations, enabling deeper insights into regional education trends
* Created reports and managed data queries using XML-based SQL abstraction tools.

**Concept Schools** Chicago, IL

Teacher, Data Analyst 08/2019 - 06/2023

* Taught a diverse curriculum including Dual Credit Pre-calculus, AP Physics, Computer Science Principles, Web Design, and Unity-Based Game Design
* Authored two grants, securing over $100,000 in funding for Project Lead The Way (PLTW) and Game Design classes
* Implemented data-driven strategies that improved student performance on state tests by at least 5%.
* Provided daily mentorship to new staff, facilitating the achievement of their professional goals
* Developed a comprehensive four-year computer science program offering multiple pathways for students to pursue careers in technology and science, resulting in certifications in Unity 3D, Google, and PLTW
* Built internal data dashboards to assist teachers in data exploration activities

Hammond Academy of Science and Technology Hammond, IN

Grade Chair, Teacher 06/2014 - 07/2019

* Taught: Algebra 1, Geometry, Web Desing, and Computer Science Principles
* Managed day to day activities and operations for 9th and 10th grade teachers
* Wrote grants to fund the new computer science department valued over $30,000
* Collaborated with the 10th grade English team to create an ISTEP+ support program. Results showed student growth ranking in the 90th percentile for participation.
* Created teacher compensation committee improving average salary by over $26,000

**Sonam Technologies**  Crown Point, IN

Data Engineer 05/2015 - 07/2018

* Designed and implemented a cloud-based data warehouse using SQL to collect, store, and manage both real-time and historical product data, improving data accessibility and analysis.
* Built and deployed regression models using customer data to predict playground degradation patterns, optimizing maintenance strategies and extending product lifespan
* Developed and automated ETL pipelines using Apache Airflow, optimizing data ingestion, transformation, and integration from various sources

Outreach

**QuarkNet** Hammond, IN

Lead Teacher 06/2014 - 08/2023

* Orchestrated international workshops that connected high schools worldwide with live data from the Large Hadron Collider, fostering global educational collaborations
* Collaborated with Fermilab's Silicon Detector Laboratory to identify and address production errors in readout chips for the Forward Pixel Detector at CMS
* Honored in the NWI Society of Innovators in 2017 for supporting the community

Education

**Bellevue University** Bellevue, NE

Master of Science, Data Science

**Purdue University** Hammond, IN

Master of Science, Mathematics

**Southern Illinois University** Carbondale, IL

Bachelors of Science, Mathematics

Skills & Interests

Programming Languages and Tools: Python, JavaScript, R, MATLAB, SQL, HTML/CSS, Pandas, Scikit-Learn, Hadoop, Spark/PySpark

Data Visualization Tools: Excel, Google Sheets, Seaborn, Matplotlib, Power BI, LaTeX

Human Skills: Effective Communication, Problem-Solving, Team Collaboration, Adaptability, Critical Thinking, Attention to Detail, Project Management, Curiosity and Learning, Ethical Judgment and Integrity, Lifelong Learner