Ben MacFarlane

Developer, Data Consultant & Forecaster Johnstown, CO (970) 231–9159

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SUMMARY   Army -> Gas Plant Operator -> M.S. degree -> Analyst -> Developer

I'm a unique developer with not only the required IT skills, but also a deep understanding of operations, modeling and algorithms, data analysis, and succinct presentation. Maximizing my impact by enabling analysts and decision-makers to know what their data is saying for better risk management and profitability.

SKILLS

Azure, Data Factory, BLOB, SSMS, T-SQL, Power Apps, Power BI, PowerPoint, Excel, Athena, S3, PostgreSQL.
Data modeling, Forecasting, Optimization, Linear/Non-Linear Programing, Regression Analysis, Collaboration.
Analytics, Reporting, Oil & Gas, Economics, Finance, Planning, Strategy, M&A, Data Presentation, Consulting.

WORK EXPERIENCE

Founder, Developer, Data Consultant & Forecaster **09/2018 – Present**
Blackbird BI, LLC **Johnstown, CO**

- Contracted through Velocity Insight in 2025 to develop Microsoft Power Apps for oil field personnel to read and sign-off on standard operating procedures (SOPs) to de-risk operations and increase efficiency. Includes streamlined challenge question logic and automated manager approval routing. Multiple admin screens make it easy to directly add or edit regions, personnel, SOPs, and other SQL database tables. Created SQL stored procedure for automated refresh after Admin changes and based on when the person completed the SOP last time. Designed and built end-to-end data solution, including Power BI report and auto-email summary to track progress and highlight overdue, due, needs-approved and completed.

- Successfully migrated 56 Tableau data report pages to Power BI for Qorvo Semiconductors during a six-month contract in 2024. Effectively translated complex logic, replicated look and usability, enabled DirectQuery refresh and helped new and experienced Power BI developers when they hit roadblocks.

- During 22 months as a full-time contractor for FirstLight Analytics in 2022-2024, successfully developed SQL and Power BI solutions for seven different companies with drilling, production, finance, manufacturing, and other metrics. Orchestrated cross-functional collaboration with key stakeholders, clarifying metrics, enhancing usability and minimizing iterations between planning and final product.

- Reliably engineered and administered Blackbird's Microsoft tenant to host the ETL process, SQL and Power BI reports for a large mineral owner since 2019 with 99.9% uptime on twice/daily refresh.

- For Blackbird BI, created SQL stored procedures and triggered sequentially with Azure Data Factory pipeline to forecast oil and gas production by county in the U.S. across 10 potential scenarios; displayed results in Power BI so users can run sensitivities and optimize strategic planning decisions.

- Condensed 80 million rows of production data into a concise Power BI report for users to efficiently analyze monthly production metrics of 1.4 million U.S. wells, and gain data-driven insights quickly.

- Successfully completed data consulting projects for 14 businesses, including five oil producers, three manufacturers, two energy analytics firms, two midstream companies and two large mineral owners.

- Designed and deployed automated workflows on Microsoft Azure, SQL, and Power BI to optimize data collection, processing, and visualization.

Principal Analyst – Optimization, Strategy & M&A 08/2012 – 08/2018
DCP Midstream Denver, CO

- Championed creation and implementation of daily corporate model calculating optimal ethane rejection levels for large fleet of natural gas processing plants. Collaborated with Commercial and Operations to include constraints, penalties, and transport revenue, to validate the results, and to adjust plant settings, resulting in a substantial $1 million/month increase in company earnings.

- Analyzed and forecasted throughput, cash flow, and net present value for large capital projects and M&A transactions of $150M - $3B, providing critical insights for strategic decision-making.

- Created PowerPoint slides for Board of Directors meetings and investor presentations by attending executive meetings, compiling and clarifying leadership's message, collaborating with FP&A, Accounting, Commercial, Engineering, Operations, and IT and condensing into accurate, succinct, and complete slides with minimal feedback iterations needed.

- Delivered regular executive-level reports and presentations on oil, gas and natural gas liquids (NGL) market trends, risks and emerging opportunities, advising leadership on important strategic decisions.

- Analyzed and reported on $1.5B annual capital program, as well as gross margin and expenses in 2013 as part of Financial Planning & Analysis (FP&A). Scrutinized and analyzed budget and forecast variances; delivered comprehensive reports for heightened transparency, accountability and decision-making.

Sr Analyst – Oil, Gas & NGLs Supply, Demand & Price 08/2007 – 07/2012
S&P Global (BENTEK Energy) Evergreen, CO

- Analyzed and forecasted oil, natural gas and natural gas liquids (NGLs) data, and presented comprehensive market insights on supply, demand, constraints, and pricing, helping clients better understand current market drivers and future impact, resulting in better decisions and higher profits.

- Devised and implemented automated data architecture and models including "Forecasted Natural Gas Demand from Power Plants", and "Forecasted NGL Demand from Petrochemical Facilities", facilitating insights and directly contributing to substantial ~5x surge in company revenue over 5 years.

- Condensed complex datasets and concepts into simplified and complete messages, keeping busy analysts and decision makers informed about important market events, insights and trends.

- Presented findings at consulting engagements, industry conferences, and written reports to over 1,000 clients weekly, establishing credibility as a thought leader in the industry.

Gas Plant Operator 02/2002 – 02/2007
DCP Midstream Roggen, CO

- Operated natural gas processing plants and gathering systems to maximize throughput and recoveries while minimizing cost and risk.

Mechanic & Sergeant 11/1997 – 05/2001
U.S. Army Schweinfurt, Germany

- Successfully managed five soldiers and the maintenance of 35 trucks and tracked vehicles, receiving a NATO Medal for service in Kosovo, and an honorable discharge at the completion of enlistment term.

EDUCATION

M.S. Mineral & Energy Economics 08/2006 – 12/2007
Colorado School of Mines Golden, CO

B.S. Business and Religion 08/1993 – 05/2006
Liberty University Lynchburg, VA