Raymond Buhr

Software Engineer, Machine Learning

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🧠 SKILLS

Machine Learning (scikit-learn, xgboost, lightgbm, pytorch, tensorflow, keras, spark MLlib)

Programming (python, scala, go, ruby, javascript, bash)

Infrastructure (AWS, GCP, terraform, ansible, git, CI/CD, kubernetes, ECS, Lambda)

Data Engineering (spark, Databricks, SQL, PostgreSQL, MySQL, nosql, dynamodb, mongodb, bigtable, BigQuery, Snowflake, Redshift, Airflow, Step Functions, dbt)

💼 PROFESSIONAL EXPERIENCE

Software Engineer, Technical Lead, Machine Learning, *StockX* ↗   Apr 2021 – present
    Chicago, IL
- Lead team planning and tactical decisions regarding technology as the technical lead for the Recommendations team
- Designed architecture for recommendation system including candidate generation, reranking, and serving layers
- Consolidated and optimized infrastructure and components across multiple machine learning projects leading to reduced latency by 50% and reduced annualized costs by over $200K USD
- Developed model features and product carousels that lead to >2.5% net increase in site-wide conversion rate confirmed through A/B testing

Senior Data Scientist, *PayPal*   Dec 2018 – Mar 2021
    Chicago, IL
- Developed a recommendation system to advise merchants which evidence to submit to most likely win disputes and chargeback claims (patent filed)
- Created a churn prediction model that saved multiple 8-figure contracts (tens of millions of annualized revenue)
- Designed an anomaly detection system to identify changes in payment gateway traffic from individual merchants used to engage with at risk accounts
- Optimized SQL and built Airflow pipelines used for customer facing financial reports

Manager of Data Science, *Pangea Money Transfer*   Mar 2018 – Dec 2018
    Chicago, IL
- Implemented modern data stack using Stitch Data for data ingestion to S3, dbt running on AWS ECS, and Snowflake
- Built a web scraper to track consumer currency transfer pricing and used it to optimize pricing in different markets
- Investigated referral fraud and convinced marketing to reduce referral bonuses without negatively impacting customer acquisition
- Developed a machine learning solution deployed to AWS Lambda to trigger emails and push notifications for price alerts to customers

Senior Data Scientist, *Raise Marketplace*   Aug 2015 – Mar 2018
    Chicago, IL
- Developed a machine learning algorithm to rank prospects and leads for sales team leading to 500% increase in conversions (for 6 months then we ran out of quality leads)
- Built classification machine learning algorithm for tracking bulk buyers by brand for fraud detection and monitoring
- Designed and implemented data engineering platform on GCP centered around BigQuery

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🎓 EDUCATION

Master of Information and Data Science, *University of California, Berkeley*   2014 – 2016

Bachelor of Arts, Economics, *Occidental College*   2005 – 2009