ROBERT LUDWIG

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/ WORK

Deloitte Consulting / Manager – Applied AI

Data Science Consulting with a focus on infrastructure analytics for enterprise big-tech clients   2020-Present

+ Manage multi-year end-to-end data science and data engineering projects with global remote teams of 5-15 practitioners, specializing in SRE, infrastructure analytics
+ Serve clients in mega-cap technology space, building models for forecasting, infrastructure analytics, A/B testing, and time series analysis
+ Specialize in developing pilot data science implementations for clients to demonstrate effectiveness, with multiple projects greenlit for $5M+ budgets following the proof-of-concept stage
+ Coordinate with internal & client stakeholders at the director level and above to ensure we hit delivery goals, communicate successes and develop early mitigations for potential issues
+ Launched multiple internal skills development and mentorship initiatives to facilitate talent development, including cloud certification and data visualization trainings
+ Lead editor for internal AI blog, where teammates share AI implementation case studies, with monthly discussion group & newsletter

Technologies Used: AWS/GCP, Airflow, Spark, Presto, Kafka, R, Python (Pandas, NumPy, SciKit)

                2014-2020

Ride Amigos / Senior Systems Engineer

Commuter engagement platform that drives behavior change by tracking how users commute to work and offering rewards to incentivize greener trips

+ Lead Node.js developer on API used by 200,000+ active users to log their daily trips across 70 partner sites
+ Developed, tested, & deployed algorithms for analyzing user behavior, including detecting commutes using noisy GPS data, detecting changes in commute behavior, and evaluating the effectiveness of incentive-based behavior change programs
+ Design analytics and reporting platform for site administrators to view real-time user statistics and aggregated platform information on millions of commutes.
+ Manage a team of 4 other developers, lead project planning efforts, coordinate with other team leads to plan long-term feature roll-outs and support inter-team development efforts

Technologies Used: Javascript (Node.js), Java, AWS EC2, AWS S3, AWS Cloudwatch, MongoDB, Jenkins, Express, Mocha

Lyrical Labs / Backend Developer

Video encoding SaaS platform that used proprietary analysis to encode exceptionally high-quality video in the cloud and on-premises   2012-2014

+ Designed and developed a 1000-instance scalable AWS-based video encoding platform that handled thousands of concurrent hours of video encoding
+ Developed sophisticated error detection and handling processes to ensure we met a guarantee to deliver video within a 1-hour window
+ Supported API development and a frontend platform for end users to upload videos, monitor their progress while encoding, and for administrators to see an overview of the cloud system status and test results

Technologies Used: Java, AWS EC2, VMWare, AWS RDS, MySQL, RedHat, Python, C++

/ EDUCATION

Masters in Data Science, Indiana University-Bloomington, 3.75 GPA   *5/2019*
School of Informatics, Computing, and Engineering (SICE)
Course Highlights: Data Mining, Algorithm Design & Analysis, Exploratory Data Analysis,
Advanced Database Concepts, High Dimensional Data, Differential Geometry

Bachelors in Classics, New York University, 3.8 GPA   *12/2011*
President of NYU Classics Club, Favill Prize in Translation (2010), Deans List (2009-10)

/ SKILLS

Human Languages: French (Fluent), Chinese (Intermediate), Latin, Greek, Spanish (Basic)
Programming Languages: Javascript, Python, R, Java, C++, C
Frameworks: Express, Flask, Shiny, Koa, OpenCV, Pandas, NumPy, SciKit, tidyverse
Databases: MongoDB, PostgreSQL, MySQL, SQLite3, Spark, Presto, Apache Hive
Editors: VSCode,
Platforms: Linux (Ubuntu, Fedora, RedHat, Amazon Linux), Windows, MacOS
AWS: EC2, S3, SQS, SES, Lambda, CloudWatch, boto

/ CERTIFICATIONS
AWS – Solutions Architect
Databricks – Developer Essentials
NVIDIA – Deep Learning Institute