

Zach Pate

1336 East Drive SW, Roanoke, VA | (817) 219-5517 | zacharyhpate@gmail.com |
<https://www.linkedin.com/in/zach-pate-a17342157/>

Professional Summary

Zach is an experienced Data Scientist with expertise in the entire analytics lifecycle. During his career, he has led analytics projects in multiple transportation sectors, including research and safety at the DOT as part of Deloitte Consulting. Zach has a passion for meaningful data science work and is passionate about gaining insights from new and messy data.

Experience

SENIOR CONSULTANT | DELOITTE CONSULTING LLC | AUGUST 2022 - PRESENT

- Led data science and data engineering activities for multiple Department of Transportation safety and research initiatives. Zach supported four analysts, providing code review and technical support, alongside his own work.
- Created machine learning pipelines to capture relationships and forecast transportation related metrics. Established first-of-its-kind dataset for transportation demand research.
- Utilized Python and R to build machine learning models for high-dimensional data, including regularized regression, B-Spline, XGBoost, and deep learning methods as part of statistical work.
- Built and maintained multiple automated ETL processes to ingest and analyze safety data.
- Taught 'Introduction to Machine Learning' and 'Python 101' for Deloitte's internal education courses.
- Provided AI and data analytics expertise on multiple winning government contract proposals.

RISK ANALYST | GLOBAL LENDING SERVICES LLC | DECEMBER 2019 - AUGUST 2021

- Conducted analytics and statistical analysis to monitor and improve key loan origination functions.
- Recommended and implemented scoring model for approved loan applications, providing callers automatic feedback on probability of loan being booked. Continued project by excluding 20% of all approvals from queues, shifting caller time to higher potential approvals.
- Developed a logistic regression Model to set buying and sales monthly goals based on internal and external data, reducing variance by 20% and creating more equitable goals.
- Identified fraudulent and non-compliant dealerships through modeling of discrepancies, early defaults, and other behaviors. Worked closely with Chief Operating Officer and Chief Analytics Officer to ensure the model and its visualization met CFPB guidance.

Education

MASTERS OF SCIENCE IN ANALYTICS | GEORGIA INSTITUTE OF TECHNOLOGY

- Relevant Coursework: Big Data and Visual Analytics, High Dimensional Analytics, Simulation, Deep Learning, Computation Data Analysis

BACHELOR OF ARTS IN ECONOMICS AND POLITICAL SCIENCE | CLEMSON UNIVERSITY

Certifications/Skills

- AWS Machine Learning Specialty Certification
- Programming: Python, R, Git/GitHub, AWS, Microsoft SQL Server, Snowflake, Tableau, PowerBI
- Analytical: Supervised/Unsupervised Learning, Forecasting and Time-Series analysis, High-dimensional analytics, Tensor Analysis, Natural Language Processing, IOT Data Analysis