Dat Nguyen

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EDUCATION

University of Pennsylvania
Philadelphia, PA

Master of Science in Engineering, Data Science · *Sep 2020 – May 2022*
- Honors: Dean's Master's Scholar (top 15%)
- Relevant Coursework: Big Data Analytics, Machine Learning, Deep Learning, and Data Structure & Algorithms

Brigham Young University
Provo, UT

Master of Science, Accounting; Bachelor of Science, Accounting · *Aug 2010 – Apr 2015*
- Honors: Brigham Young Scholarship; Dean's List Award (top 5%) for academic excellence — GPA: 3.6/4.0
- Relevant Coursework: Linear Algebra, Calculus (I&II), and Principles of Statistics

TECHNICAL SKILLS

Programming Languages: Python, SQL/NoSQL, JavaScript, R, and C++
Machine Learning & Big Data: Scikit-Learn, PyTorch, MLlib, MXNet, Spark, Hive, and Hadoop
Cloud Platform / Other: AWS, Microsoft Azure, Vue, and Node.js

EXPERIENCE

Deloitte Transactions and Business Analytics LLP
Costa Mesa, CA

BI Senior Consultant / Senior Data Analyst · *Sep 2017 – Jul 2020*
- Revised and optimized SQL queries to extract data with 2 million rows and reduced retrieval time by 30%
- Deployed several ML models including random forest and XGBoost to predict churn rate and improved traditional, baseline model's accuracy by 4%
- Prototyped and employed predictive models to promote clients' sustainability with potential $2.0M savings
- Served as firm's liaison on multiple projects and successfully secured 2 follow-on deals with $500K worth of revenue
- Mentored and provided technical training for 15 interns and junior consultants to accelerate onboarding process

Deloitte Transactions and Business Analytics LLP
Costa Mesa, CA

BI Consultant / Data Analyst · *Sep 2015 – Sep 2017*
- Streamlined options volatility calculation process by writing Python scripts, shortening project's timeline by 20%
- Executed competitive analyses which led to client's total savings of $640M as part of restructuring plan
- Created visually impactful dashboards in Tableau for data reporting and presented to executive leadership

Nomura Securities
New York, NY

Investment Banking Analyst · *Jun 2014 – Aug 2014*
- Collaborated with senior leads on 2 live leveraged buyout transactions that closed for $350M in FY 2015
- Designed LBO model on Multimedia Games to analyze pro forma cashflows, credit statistics, and IRR

PROJECTS

Facial Expression Recognition | *Python, PyTorch, Detectron2, ResNet18*
- Deployed Faster R-CNN model and trained on custom dataset to achieve an AP50 of 70% for face detection task
- Implemented custom-built CNN and ResNet18 based CNN for facial expression recognition and achieved best accuracy score of 65%, outperform KNN baseline model by 35%

Jeopardy! Web Application | *JavaScript, Vue.js, Node.js, Oracle SQL, AWS*
- Developed web application with Vue and Node that allows users to interact with more than 380,000 Jeopardy! questions dated back to 1986
- Designed RESTful API backend server to enable data to be stored persistently in AWS RDS

US Car Accidents Severity Prediction | *Python, Scikit-Learn, LTSM, Apache Spark*
- Trained a classifier to predict car accident severity with XGBoost using spatial, temporal and weather data, achieving an accuracy score of 95%, beating logistic regression baseline model by 14%
- Constructed LSTM network to pick up signals from text description and predicted severity with 91% accuracy

Sentiment Analysis | *Python, NLTK, Pandas, Numpy*
- Scrapped and performed sentiment analysis on 10 different gaming subreddits with over 55,000 top comments
- Identified 3 areas of concerns for cloud gaming: low latency, lack of modding ability, and game ownership