KUNAL RAI

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EDUCATION

Rice University   2017 - 2021
B.S. Electrical and Computer Engineering, Specialization in Data Science, Minor in Business
Relevant Coursework: Random Signals & Processes, Learning From Sensor Data, Operations Research and Optimization, Algorithmic Thinking, Data Analysis, Signals, Systems & Learning, Financial Accounting, Marketing, & Economics

SKILLS

Languages & Frameworks   Python, SQL, Spark, TensorFlow, Keras, NLTK, XGBoost, spaCy, MATLAB, & Git
Software & Skills   Technical Product & Project Management, AWS, DataRobot, & Graphic Design

EXPERIENCE

Engineering Product Management Intern - Cisco   May 2020 - August 2020

· Created Python tools to automate the handling and forecasting of compliance & re-certification costs, cut time and resources dedicated to manually conduct calculations of re-certification costs by 50% (**Python**)
· Initiated internal process improvements and data integrity standards to promote future automation of general metric tracking, reducing time devoted to upkeep of dashboards by 25%
· Led cross-functional engineering teams; accelerated progress of multiple programs towards customer ship continued during COVID, managed R&D expenses of $60k (**Waterfall**)

Data Science Intern - Chevron Corporation   May 2019 - August 2019

· Developed machine learning models to predict total production of erratic, non-declining oil wells with 25% error (**Python**)
· XGBoost & Random Forest models reduced time spent by subject matter experts in forecasting well production by 70%
· Created data pipeline to pull and clean raw well data using **Spark and SQL** for future usage

Software Engineering Intern - Lockheed Martin (Secret DOD Clearance)   May 2018 - August 2018

· Designed and developed a standalone tool to automate and predict value of F-35 software changes worth $50M+ with 85% accuracy
· Reduced manual verification time by 65% by aggregating estimations, user experiences, and feedback (Visual Basic)
· Analyzed the F-35 control system software changes with regards to integrity and tested redundancy through flight simulation

PROJECTS

Extractive Text Summarization of 10-Q Documents to Improve Financial Literacy

· Created pipeline for extractive summarization of 10-Q documents to reduce knowledge barrier for individuals new to investing and corporate reporting
· Developed novel semi-supervised LDA model to replicate human extraction on 10-Q reports with mean recall scores of 0.3

Competitive Analysis & Market Research: Nut Free Granola Bars

· Created business and marketing plans for nut free granola company with market analysis and industry growth trends
· Conducted **A/B Testing** on product designs to determine most appealing features of the bar and packaging (n=1000)

LEADERSHIP & EXTRA-CURRICULAR

President - *IEEE*, Increased industry events by 50% by working with other campus organizations   2019 - Present
Research Assistant - *Jones Graduate School of Business*, Topic modeling for sustainability reports   2019 - Present
Product Designer - Led design teams and developed designs that produced $10k in funds for clubs   2018 - Present
PWC Presentation Competition - Placed **3rd out of 800** submissions for best final oral presentation at Rice   2017 - 2018