

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 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 Bar Startup

- 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