

# KUNAL RAI

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## EDUCATION

### Rice University

2017 - 2021

**Major:** B.S. in Electrical Engineering

**Specialization:** Data Science **Minor:** Business

**Relevant Coursework:** Algorithmic Thinking, Data Analysis, Signals, Systems & Learning, Random Signals & Processes, Learning From Sensor Data, Operations Research and Optimization, Financial Accounting, Marketing, & Economics

## EXPERIENCE

### Chevron Corporation

May 2019 - August 2019

*Data Science Intern*

- Developed machine learning models to predict total production of non-declining oil wells with 25% mean error (Python)
- Utilized Random Forest and XGBoost models to optimize well data for oil decline curve analysis using DataRobot
- Created pipeline to directly predict oil well production from raw well data using Spark and SQL

### Jones Graduate School of Business

Jan 2019 - Present

*Research Assistant for Professor of Finance*

- Conducted analysis on location data to determine relationships between economic events for certain profiles (Python)
- Reduced data filtering time by 75% through efficient pre-processing algorithms using Dask and PostgreSQL

### Rice University

August 2018 - May 2019

*Teaching Assistant*

- ELEC 220: Guided 100 students through labs related to data representation, computer organization, and basic assembly
- ENG 120: Mentored four engineering students on technical writing and presentation skills to improve their grades to A's.

### Lockheed Martin Aeronautics

May 2018 - August 2018

*Software Engineering Intern F-35 Program*

**ITAR and DOD Security Clearance**

- Designed and developed a standalone tool to automate and predict monetary value of F-35 software changes worth \$500M+
- Reduced prediction time by 65% by aggregating estimations, user experiences, and feedback (VBA)
- Analyzed the F-35 controls system software updates integrity and tested redundancy through flight simulation

### Product Designer

August 2018 - Present

*Independent*

- Led design team through full product life cycle from research, design, implementation, and production of merchandise
- Sold \$11k of custom designed merchandise to Rice students, organizations, and events (Adobe Photoshop)
- Reduced merchandise cost by 15% by negotiating with suppliers, designers, and campus organizations

## SKILLS

**Programming Languages** Python, Visual Basic for Applications, HTML, SQL

**Software & Skills** DataRobot, Azure, Spark, Photoshop, Product Management, Project Management, & Git

## LEADERSHIP & EXTRA-CURRICULAR

**IEEE - Vice Chair**, Led department initiative to centralize communications between faculty & students

2019 - Present

**Rice Undergraduate Investment Fund - Portfolio Review Associate**, Technology & Consumer Sectors

2018 - Present

**Web Developer** - Created personal website and edited websites to improve design and user experience

2018 - Present

**Rice FinTech - Secretary**, Developed curricula to teach students about fintech, coding, and finance

2017 - 2018

## AWARDS

**PWC Competition** - Placed 3rd out of 800 submissions for best final presentation at Rice

2018