Rishabh Verma

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Summary:
- 6 months internship experience in Java/Python development.
- 3 years project experience in machine learning, data mining, data pipeline development (ETL), data quality assurance, and data visualization.

Skills & Tools:

Programming Languages:	Python, Java, R, SQL
Statistical Computing:	NumPy, pandas, scikit-learn, dplyr
Data Visualization:	D3, ggplot, plotly, matplotlib, seaborn, Tableau
Data Management:	Hadoop, Spark, Airflow, Azure, AWS, Snowflake

Education:

Master of Data Science — University of California, Irvine   **September 2023 - December 2024**

Bachelor of Science — University of Washington   **September 2018 - March 2022**
- Double major in Statistics: Data Science // Applied Computational Math: Discrete Math & Algorithms
- GPA: 3.79

Experience:

xFusion Technology Consulting   *Rancho Cordova, CA*
Intern, Data Engineering   **March 2023 - June 2023**
- Developed an NLP schema matching system with **Java** and **Python**, reduced manual review time over 90% in data engineering tasks and enabled faster ETL pipeline development.
- Achieved an **F-score over 0.95** using dimensionality reduction to select significant ensemble metrics.
- Deployed matching system with **RESTful API** in scalable data platform product.

UW Department of Mathematics   *Seattle, WA*
Teaching Assistant   **January 2021 - March 2021**
- Developed custom rubrics for Advanced Linear Algebra assessments and graded 120 submissions per week.
- Monitored class Q&A board and guided students' reasoning with intuitive and rigorous explanations.

Intel Corporation   *Folsom, CA*
Intern, Product Support Engineering   **May 2018 - September 2018**
- Developed strategy for data migration saving 10 hours of engineering work per week.
- Increased team productivity over 100% by developing custom data automation tools.
- Managed **Linux** embedded systems and documented solutions for OS/firmware/driver issues.

Projects:

[Smartphone PIN Inference via Motion Sensor Side-Channel](#)   **May 2021 - February 2023**
- Used **Android/Java/R** to replicate an ML-based cyber security attack.
- Developed a web presentation for a non-technical audience with **ggplot**, **D3.js**, and CSS animations.
- Responsible for app development, database design, exploratory data analysis, time series feature extraction, KPI analysis, and predictive modeling (**logistic regression, SVM**).

[Automating Smart Lights with Art](#)   **March 2022 - May 2022**
- Designed a **Python** application to train **k-means clustering** models on image data and build color palettes.
- Responsible for designing machine learning model and building pipeline of data transformations.
- Coding involves querying **RESTful APIs** with JSON, storing persistent data with SQLite, and **optimizing NumPy** computations with linear algebra.

[Computationally-Intensive Methods for Data Science](#)   **January 2021 - March 2021**
- Used MATLAB to assess various ML/DSP algorithms on scientific time series and image data sets.
- Communicated results as 5 individual scientific research papers.
- Algorithms include: **SVM**, **PCA**, random forest, **Fourier analysis**, and Gaussian filtering.
- Applications include: noise cancellation, music transcription, 3D motion tracking, video-object separation.

Outside of Work:
Audio engineer, Eagle Scout, blockchain and computer hardware enthusiast