# Krish Arora

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# Education

# University of California, Berkeley

May 2027

B.A., Data Science; B.A., Applied Mathematics

Relevant Coursework: Machine Learning Algorithms, Data Structures & Algorithms, Multivariable Calculus, Data Science Principles, Linear Algebra, Differential Equations, Discrete Math, Probability Theory, Finance Awards: PwC Case Competition: 1st Place, Bio-Rad STEM Scholar, Irvine ML Competition: 2nd Place

#### Technical Skills

Languages: Python, Java, SQL, HTML, CSS, JavaScript, LaTeX

Tools: Seaborn, TensorFlow, PyTorch, Keras, PyMC, Tableau, Pandas, Sklearn, Git, M-Suite, NLTK, QA

### Experience

### Software Development Engineer Intern

Sunnyvale, CA

Jun 2025

Amazon Web Services

• Incoming SDE Intern; Summer 2025

# Product Management Intern

Berkeley, CA

 $Momentus\ Technologies$ 

Aug 2024 - Dec 2024

- Utilized Pendo to analyze financial and usage metrics for 12 core products, resulting in a 25% increase in user revenue
- Cleaned and visualized data using correlation heatmaps to detect outliers and underperforming features; implemented a Linear Regression model to identify user dissatisfaction, driving a 35% increase in engagement through targeted features

# Quantitative Analyst Intern

San Francisco, CA

Global Key Advisors

Jun 2024 - Aug 2024

- Engineered an NLP model using GESIM in analyzing MD&A length analysis trends for 30,000 startup companies for stock price predictions; utilized sentiment analysis & readibility scales for concise information clarity (83% accuracy)
- Implemented an autonomous algorithm using Python and SQL to analyze company due-diligence scores and outcomes

## Data Analytics Consultant (Contract)

San Diego, CA

Qualcomm

Jan 2024 - May 2024

- Redesigned Qualcomm Academy website UI/UX for course/certification offerings towards global corporate users; curated high-fidelity Figma mockups now implemented on the site, resulting in a 60% increase in outsider consumer enrollment
- Established financial models for Qualcomm's offerings, factoring in value propositions, competitor pricing, and market demand in various regions; conducted sensitivity analysis to ensure competitiveness while maintaining profitability

#### Machine Learning Intern

Berkeley, CA

Outer Rim Exploration (ORE)

Jan 2024 - May 2024

- $\bullet$  Scraped geospatial muon flux data to fine-tune a CNN in detecting underground mineral deposits, achieving accuracy of 92.3% and 89.4% precision; visualized 3-D subsurface models through PyMC using Bayesian/MCMC inversion modeling
- Derived muon flux and intensity equations to calculate subsurface regions with an error margin of less than 3%

# Personal Projects

## Tensor Decomposition for Deep Neural Network Compression

- Designed tensor-train decomposition algorithms for layer shape optimization, achieving up to 87% parameter compression with across VGG-16, ResNet-50, and custom CNNs; average post-compression loss of .014, 0.98 AUC
- Achieved 50% improvement in computational efficiency on edge devices through recursive tensor reshaping and gradient-based optimization; first-authored research paper & technical poster (published in RMP Journal/Symposium)

#### WordNet Visualizer

- Built and integrated front back-end infrastructure for a scalable, browser-based tool analyzing the historical usage patterns of words in English texts; utilized Google's NGrams dataset to process and analyze over 1 billion data points
- Utilized graph and tree structures in Java, optimizing class hierarchies to enhance query processing time by 30%; applied advanced DFS traversals and implemented robust I/O pipelines in enabling fast handling and persistent data storage

#### Spam Email Classifier

- Engineered and optimized linear and logistic regression models, employing GridSearchCV for hyperparameter tuning, OHE for feature engineering, and enhanced data quality by identifying and cleaning HTML tags in spam emails
- Fine-tuned and enhanced model accuracy to 88% using the test set; achieved AUC of 0.87