Amanda's Digital Portfolio

To give a visual aid of the experiences on my resume...

A little about me...

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Access my full resume (PDF)

Hi! I'm Amanda Li, a senior at UCLA majoring in Statistics and Data Science. As a creative problem solver with a strong quantitative background, I'm excited to apply my academic skills and hands-on business experience to generate key insights and drive growth. I'm passionate about continuous learning and am always eager for opportunities to grow—whether individually, collaboratively, or within an organization. I've had some incredible experiences and projects, and I've highlighted a few favorites to give you a glimpse of my journey!

Outside of work, I love spending quality time with family and friends, binging shows, traveling, and trying new foods and desserts.

Training in Deloitte University in Texas and experienced living in NYC for the summer!

Explored Rome, Florence, Venice, and Milan and got to try the yummiest pizza from Pisa, Italy!

Two of my Favorite Courses

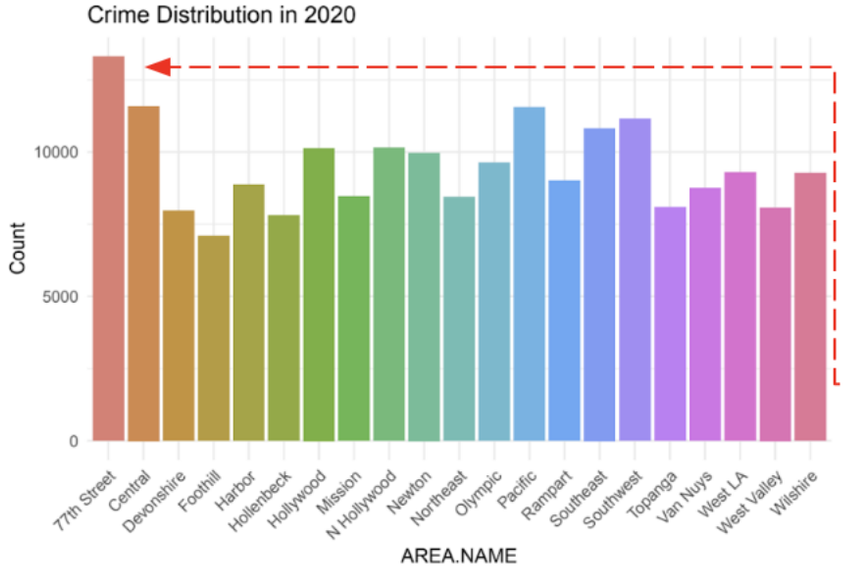
Statistical Consulting and Statistical Models in Finance
(Done in R Programming)

Introduction to Statistical Consulting (pt.1)

Problem Statement: Develop a **predictive tool** that helps assess the **likelihood of weapon involvement** in Los Angeles crimes

Goal: Leverage **statistical insights** to enhance situational awareness and **improve response strategies**.

1 Clean data, join redundant / less significant variables, and impute/remove missing values



2 Perform Exploratory Data Analysis

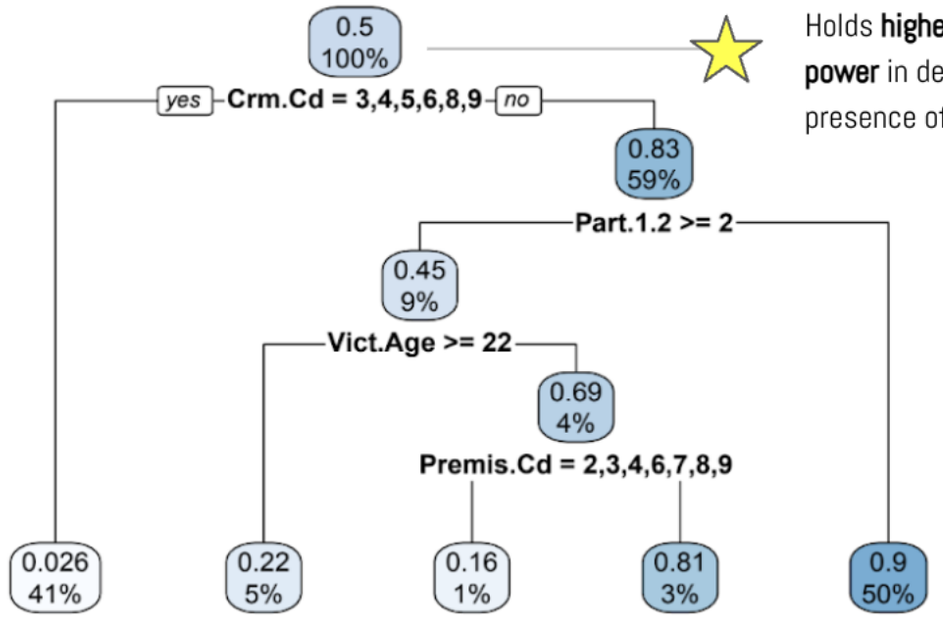
★ On average, crimes will be committed around 1-2 PM

★ 77th St & South LA has the highest crime rate

	Mean	Median	Min	Max	St. Dev
Time (military)	1,336.12	1,415.00	1.00	2,359.00	653.82
Crime Code	1.41	1.00	1.00	2.00	0.49
Victim Age	29.77	31.00	3.00	97.00	21.79
Latitude	33.98	34.06	0.00	34.33	1.77
Longitude	-118.04	-118.32	-118.67	0.00	6.12

Introduction to Statistical Consulting (pt.2)

Final Predictive Model: Decision Tree



Crime Code

Holds **highest predictive power** in determining the presence of a firearm

Decision Tree Interpretation

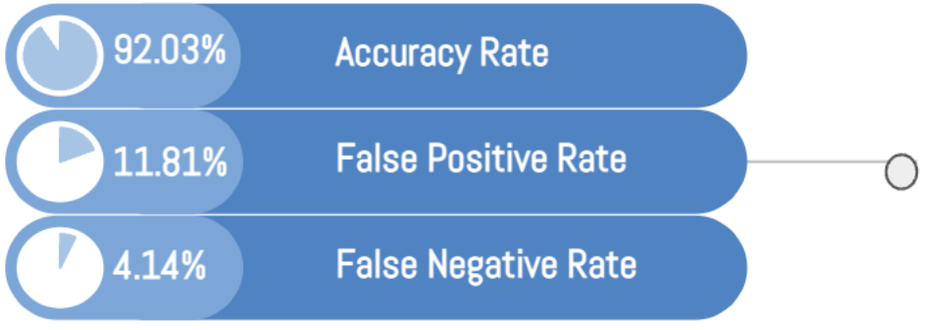
In general, **50%** of crimes are predicted to **involve firearms**. Within this 50%:

Check if the LAPD assigned Crime Code = {**3, 4, 5, 6, 8, or 9**}[1]

- ➔ If **yes**, **41%** of those crimes are predicted to have a firearm involved
- ➔ If **not**, go to the second node (**remaining 9%** of crimes)

For crimes with other crime codes, **59%** will be **Part 1 or 2** crimes

- ➔ If it's a **Part 2**[2] crime, **50%** are predicted to involve a firearm
- ➔ If it's a **Part 1**[3] crime, continue evaluating down the nodes to consider victim age and premise code



<u>Impact</u>: Created a **predictive model** using crime data to assess the probability of firearm involvement with **92% accuracy**. This tool will help the LAPD better **allocate resources**, while **increasing safety** and **preparedness** of law enforcement workers.

<u>Skills Utilized</u>:

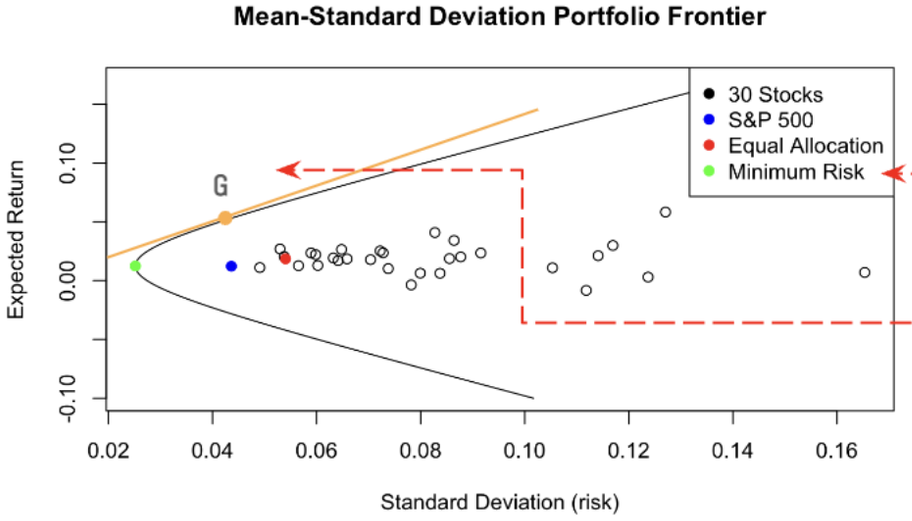
- Critical thinking & problem solving
- Data cleaning, processing, and feature engineering
- Predictive analytics and testing
- Data visualization & interpretation

1 Crime Codes: {3 = Robbery, 4 = Assault, 5 = Burglary, etc.}
2 Part 2 Crime: Forgery, Fraud, and NSF Checks
3 Part 1 Crime: Violent and property crimes.

Statistical Models in Finance

Problem Statement: Client has **$100,000** to invest. Find the **composition** of the optimal portfolio **G**, it's expected **return**, and **risk**[1]

Goal: Learn statistical techniques behind **investment theory**, **risk management**, and portfolio **optimization**



Using **modern investment theory**, we can...

- Find all portfolios that lie above the **global minimum variance portfolio** (in green) gives the **largest expected return** for any level of risk
- Find the tangency point 'G' that allows investors to **maximize the Sharpe ratio**, optimizing the **balance** between risk and return

Composition

Find $\boldsymbol{Z} = \boldsymbol{\Sigma}^{-1}\underline{\mathrm{R}}$ and normalize:

$\boldsymbol{X} = \boldsymbol{Z} / \boldsymbol{\Sigma Z}$

$\boldsymbol{X}$ = [0.53, -0.50, 0.97]

Expected Return

Mean = $\bar{\mathrm{R}} = \boldsymbol{\Sigma X} \rightarrow 0.0057$

Risk

Variance = $\boldsymbol{X}^{\mathrm{T}}\boldsymbol{\Sigma X} \rightarrow 0.0017$

Std. dev = $\sqrt{0.0017} \rightarrow 0.0412$

Results

Invest $53,000 in Stock **X, borrow** $50,000 from Stock **Y** to **invest** $97,000 in Stock **Z**

Implications and Impact: Gain deeper understanding of **portfolio theory and financial planning**– optimizing the **risk and return trade-off**, reducing overall risk by **diversification**, and evaluating portfolio **construction and performance**.

1 Data redacted for privacy reasons

Professional Experience

(most recent)

Deloitte Global - Global Sales Excellence Consulting (pt.1)

Deloitte.

Project 1: Create a custom **macro-driven** tool to **automate** and **optimize** mentorship **pairings** for program leaders

Goal: Apply **statistical** and technical knowledge in the intersection of **consulting and technology**

The Process:

1. Conduct **survey** on professional **background/motivation** for members
2. **Import** survey results into Excel and **clean** up response **database**
3. Assign variable **weights** by **important/relevance** and build macro

Mentee Name	Available to Pair	Total Pairing Points	Primary Interest	Interest Point	Tenure
Name 1	No	14	Global Connections	1	4
Name 2	No	12	Global Connections	1	10
Name 3	Yes	11.5	Career Growth	0	2
Name 4	Yes	11	Career Paths	0	4

Mentee Point Documentation System (Ex.)

Mentor is available and wants to be paired with them again	30
Wants career growth & years of experience (YoE) < mentor YoE	5
Wants career paths and mentee tenure < mentor tenure	5
Wants global connection and has no/same country preference	5

Logical Flow

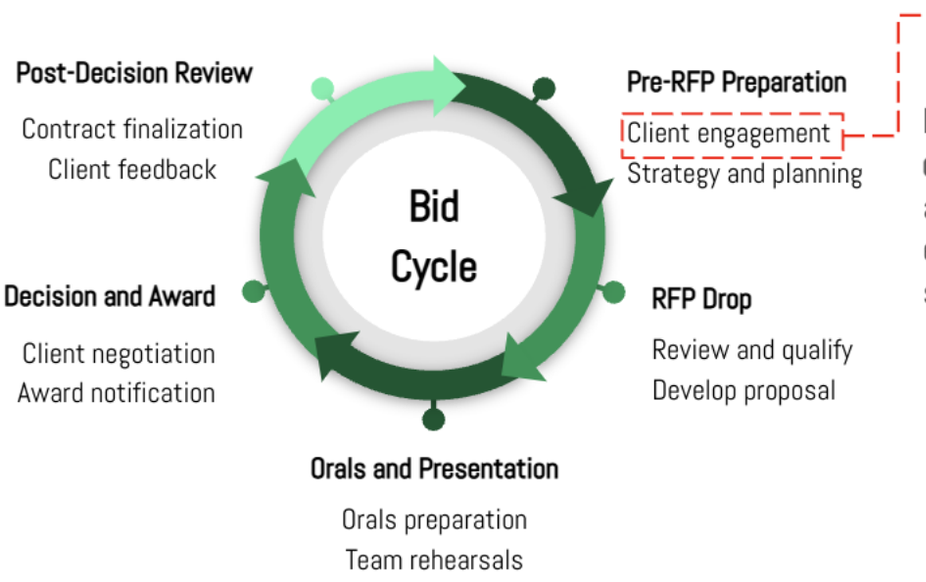
- **Initialize** macro & define variables
  - Loop through mentors and **pull respective info**
    - **Check availability** of mentor and mentee
    - Match variables with XLOOKUP and **calculate total** points
    - **Sort by rank** and output results
  - Loop through **mentee profiles** for each mentor

Deloitte Global - Global Sales Excellence Consulting (pt.2)

Deloitte.

Project 2: Create a comprehensive **firm-wide training** to coach Senior Managers and PPMDs on the Deloitte Global **Sales Framework**

Goal: Combine consulting knowledge, **business and sales** acumen, with **project management** skills



Let's zoom in on **client relations** – a crucial part in each part of the sales cycle.

Created Checklist to Become Differentiated in Client Relations

- ❑ We possess a **strong understanding** of the **key buyers** and their **needs**, **expectations**, and **selection criteria**
- ❑ We understand how the **success** of the opportunity **aligns** with **personal/professional interests** of key buyers
- ❑ Understand client **sentiments** about **incumbents**
- ❑ Can show our **capabilities** through **SME** interactions/events

Reinforced the importance of Qualification

- **Efficient resource allocation**: focus effort and time on high-potential bids
- **Increase win rate**: ensure client needs, budget, and expectations are met
- **Strengthen client relationships**: Transparency about qualification and commitment to delivering value builds client trust over time

Impact: Analyzed key **focus areas** at each stage of the **bid cycle**, ensuring **alignment and consistency** across teams globally. This project empowered sales leaders to focus on **high-value solutions** tailored to **client needs**, ultimately enhancing **client satisfaction**, improving win rates, and **driving sustained growth**.

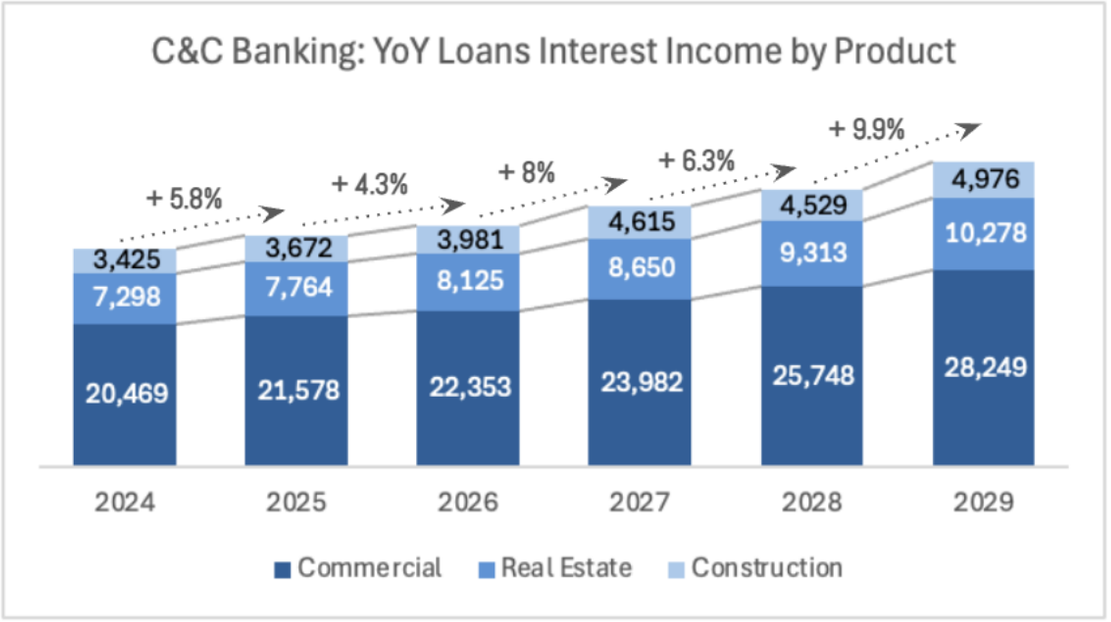
City National Bank - Financial Planning & Analysis

Project 1: Use financial statements to evaluate loan volumes and interest income across multiple product types

Goal: Use data analysis and visualization to identify key growth trends and inform strategic decision-making

Designed dynamic, refreshable templates that use index-match to extract and organize relevant data from a database into platform-specific tables

Commercial & Corporate Banking Current Yr Ratios (in MM)						
Year	2024	2025	2026	2027	2028	2029
Commercial	20,469	21,578	22,353	23,982	25,748	28,249
Residential	122.3	123.1	125.6	129.2	132.8	136.4
Real Estate	7,298	7,764	8,125	8,650	9,313	10,278
Construction	3,425	3,672	3,981	4,615	4,529	4,976
Other	104.1	100.6	97.8	94.6	99.7	108.1
Equity Lines of Credit	3.2	3.4	4.1	4.2	4.5	4.9
Credit Card	53.6	56.2	58.1	61.3	65.4	71.0
Installment	1.1	1.2	1.4	1.6	1.7	1.9
SBA - PPP	46.2	39.8	34.2	27.5	28.1	30.3



The **largest source** of revenue for banks come from **interest income**, From these YoY analyses and future projections, we can…

- **Identify leading segments** and new potential revenue streams
- Analyze **trends** compared to the **market** and core **competitors**
- Make data-driven **insights** and support **strategic planning**
- Set realistic **financial targets** across product lines and platforms

Skills Utilized:

- **Banking** and economic knowledge to analyze **financial statements**
- **Business analysis** to **identify trends** and high-growth opportunities
- **Data visualization** to design informative charts to **convey complex data**
- Advanced **Excel knowledge/formulas** to summarize meaningful information

Thank you for your time!

Feel free to reach out @amandali2415@gmail.com if there's any comments/questions