# Matthew Lim

Pleasanton, CA • matthewlim@berkelev.edu • (925) 719-6872 • linkedin.com/in/matthewilim25 • matthewlim.me

### **EDUCATION**

#### University of California, Berkeley

B.A. Data Science & Business/Industrial Analytics

- Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming, Principles & Techniques of Data Science, Probability for Data Science, Data Engineering, Industrial and Commercial Data Systems, Machine Learning & Artificial Intelligence
- Activities: Data Science Society Project Manager, Theta Tau Professional Engineering Co-Ed Fraternity Vice-President

## WORK EXPERIENCE

#### Mattel

Data Engineer Contractor

Designing and implementing a scalable data pipeline and master data repository to consolidate ESG KPIs across departments into Google BigQuery; generate Tableau dashboards that benchmark Mattel's metrics against industry standards' sustainability goals.

#### PricewaterhouseCoopers (PwC)

Software Engineer Intern

- Attained a 35% boost in operational efficiency and responsiveness by spearheading the design and implementation of Azure Functions in C# to integrate metadata into Azure Service Bus, automating client response delivery through Power Automate and utilizing REST APIs with Postman requests to interact with Graph APIs and SharePoint APIs for retrieving Microsoft user data.
- Fortified security protocols by developing **Python** functions that rigorously assessed file-level permissions for **SharePoint** files; implemented robust security filters in Azure AI Search to protect user data and ensure compliance with regulatory standards.
- Enhanced user experience by revamping the front end for a generative AI application, engineering Power Fx within Canvas application screens to streamline the application's chat history submissions through intuitive design and improved functionality.

#### **Conagra Brands**

#### Machine Learning Engineer Contractor

- Achieved a 31% reduction in analysis time by engineering a proprietary GPT model utilizing the PrivateGPT API for Conagra employees to analyze quarterly investor earnings call data, enabling faster insights through a privacy-focused, localized solution.
- Optimized data handling efficiency by 35% through developing a secure, context-aware AI application using a custom generative AI framework; explored and tested various LLMs, along with technologies such as FastAPI and LlamaIndex, to optimize performance; and implemented a Retrieval Augmented Generation pipeline for efficient document ingestion and contextual responses.

#### CareerVillage

Data Science Consulting Intern

- Ranked in the top 7% (6/77) of PwC's consulting intern teams through brainstorming and delivering strategies for CareerVillage.
- Conducted comprehensive analysis of 37k+ rows of user data using Excel, Python, and Power BI, employing Natural Language Processing and Sentiment Analysis techniques to extract demographic insights and visualizations for customer segmentation.

### **PROJECT WORK**

Matthewlim.me | AWS (S3, Route 53, CloudFront, DynamoDB, CI/CD), Python, JavaScript

Developed a resume website on AWS using HTML, CSS, and JavaScript, integrated a visitor counter with DynamoDB, API Gateway, and Lambda in Python, and followed best practices in IaC and CI/CD pipelines with GitHub Actions, ensuring a scalable portfolio.

#### Music Mate | Python, Pandas, Seaborn, Scikit Learn, Random Forest

- Deployed an interactive Flask website that analyzes user listening habits with Spotify API's insights based on a comprehensive EDA, feature engineering, hyperparameter tuning, and model evaluation, providing users with personalized music listening insights.
- Trained and cross-validated a mood classification Random Forest model on 1k+ Spotify tracks, analyzing key song features to • predict mood on user playlists with high accuracy and relevance, achieving an accuracy rate of ~82% and a precision rate of ~80%.

#### Spam Email Classifier | Python, Pandas, Scikit Learn, Logistic Regression, Feature Engineering

- Nov 2023 Processed 10k+ labeled/unlabeled samples, engineered features using techniques like one-hot encoding, and implemented logistic regression for classification, achieving a training accuracy of ~85% to effectively filter spam emails through key spam words.
- Employed hyperparameter tuning via GridSearchCV, evaluated model performance with metrics (e.g., accuracy, precision, recall, F1, etc.), and visualized the ROC curve for comprehensive assessment, ensuring a robust and reliable spam classification system.

### **SKILLS & INTERESTS**

#### Languages: Python, SQL, Java, C++, C#, HTML, CSS

Technologies: Spark, Tableau, PowerBI, AWS, Azure, Docker, REST APIs, NumPy, Pandas, Matplotlib, Scikit-Learn, Flask, Plotly, TensorFlow, PyTorch, OpenCV, Relational Databases, PostgreSQL, DynamoDB

Tools: Git, Docker, Linux/UNIX, Agile, Confluence, CI/CD, Relational Algebra, Database Normalization, GitHub Actions, Postman Interests: Cooking, Coffee Brewing, Music, Jazz Alto Saxophone, Hackathons, Gym & Fitness, Bouldering, Reading, Video Games

## San Francisco, CA

## Jun 2024 - Aug 2024

## San Francisco, CA

Feb 2024 - May 2024

Remote

### Jun 2023 - Aug 2023

## Jun 2024 - Jul 2024

### Feb 2023 - Feb 2024

## Sep 2024 - Present

GPA: 3.7

Remote