

# Jiekun Liu

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## Education

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- **University of California, Berkeley** Berkeley, California, USA  
*Bachelor of Arts in Statistics* May 2024

## Work Experience

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- **Atombits** Beijing, China  
*Data Engineer, Virtual Avatar* January 2022 – July 2022
  - Deployed the **VLAD** algorithm based on the **BoW** API in Python with the Kinetics dataset on text-to-speech and mouth video data, improved animation accuracy by **10%**
  - Adopted **pratt** tools for speech annotation, utilized **LSTM** model to optimize interaction sequences, user test showed that the comprehension rate of voice texts increased by **12%**
  - Incorporated **Apache Kafka** by integrating Kafka producers at the data source for real-time log data streaming, resulting in a **15%** improvement in system monitoring
- **LiYi International Trade Company** Cupertino, California, USA  
*Data Engineer, Jewelry Business* October 2022 – May 2023
  - Queried and filtered high-value customers by **MySQL**, distributed targeted digital coupons based on purchasing behaviors, and achieved a **12%** growth in cross-selling revenue
  - Utilized historical jewelry data, trained an **LSTM** model in Python with **TensorFlow**, recognized seasonal sales trends. Conducted promotions for the peak season, and led to a **25%** sales increase
  - Transformed a labor-intensive, manual weekly reporting process by creating an efficient **Tableau** dashboard, enhanced data accessibility and saved **10 hours** in weekly reporting
- **Stock Trade Society** Toronto, Canada  
*Data Engineer, Quant Trading System* December 2020 – August 2021
  - Developed a Python script using **K-means** for customer segmentation and created a **MySQL** relational database for content personalization, resulting in **7,000** extra orders
  - Applied the **LSTM** algorithm and trained models in Python in CNCB bank data, forecasting backtest intervals and A-share stock trends, culminated in an annualized return rate of **9%**
- **Memegle** San Diego, California, USA  
*Data Engineer, Memes Searching Engine* December 2020 – August 2021
  - Deployed a web crawler with **Beautiful Soup** library in Python, captured an **8TB** meme dataset, and used **MongoDB sharding** and **multi-threading** for efficient storage and faster data retrieval
  - Incorporated **Mutualist Network** to identify synonyms in the meme database, surpassing traditional models by improving synonym mapping and reducing search ambiguity by **7%**
  - Designed a recommendation system using **Collaborative Filtering** technique, analyzing user interactions to suggest tailored meme content, users increased by **3000** in 7 days

## SKILLS & INTEREST

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- **Technical Skills:** Skilled in Python (including Pandas, Matplotlib, Keras, Pytorch, and Tensorflow), R, SQL, data visualization with Tableau and Power BI, database management, API usage, and documentation (PRD, MRD, BRD)
- **Languages:** Fluent in Chinese
- **Interests:** Music Composer, Professional rock guitarist(Asian Tour and Music Festival)