

(470) 601-4801  
Atlanta, GA  
bestkelvin08@gmail.com

# Te-Kai(Kelvin) Chou

GitHub: TeKaiChou  
LinkedIn: TeKaiChou

## EDUCATION

### Georgia Institute of Technology

- Master of Science, Operations Research (Data Science Concentration)

Atlanta, GA

Aug. 2021 — Dec. 2022

### National Chiao Tung University (NCTU)

- Completed 21 credits toward M.S. in Industrial Engineering and Management
- Bachelor of Science, Industrial Engineering and Management | GPA: 3.74/4.0

Hsinchu, Taiwan

Sep. 2020 — Jun. 2021

Sep. 2016 — Jun. 2020

## SKILLS & CERTIFICATIONS

### Certifications

AWS Certified Cloud Practitioner (CCP)

### Programming & tools

Python, R, SQL; MS office, Tableau; PySpark, Snowflake, AWS; DBT, Docker, Git, Linux

### Data Science

Machine Learning, Deep Learning, Regression Analysis, Data Mining, Statistical Methods, Data Visualization, Database Management, Big Data, Natural Language Processing (NLP)

## WORK EXPERIENCE

### BlueX Trade

Taipei, Taiwan

#### Data Scientist Intern

Jul. 2022 — Aug. 2022

- Developed ETL pipelines with DBT and orchestrated tasks with Airflow for automating SQL data manipulation process, creating savings of **1** manual hour daily
- Experimented with SARIMA and LSTM models for forecasting customers' future bank account balance, boosting creditworthiness assessment effectiveness by **10%**
- Deployed custom time series models to production with AWS SageMaker and ECR to assist practical business decisions; reduced underwriting team response time to within **3 days**
- Improved conversion rate by **2%** through marketing funnel analysis and tracked KPIs with Tableau dashboard

### NCTU Supply Chain Management Lab

Hsinchu, Taiwan

#### Undergraduate Research Assistant

Sep. 2018 — Jun. 2019

- Partnered and formulated problems with clients and team workers in project planning, development, and execution
- Shortened defects detecting process time by **50%** and identified the types of defects on panels by building two decision tree models and engineering image features with GLCM using Numpy and OpenCV

## TECHNICAL EXPERIENCE

### Next Meme Stocks Forecast

Jan. 2022 — May. 2022

- Conducted web scraping to retrieve **10+** million social media posts/comments of 2021 from Reddit and Twitter
- Applied NLP for sentiment analysis and ticker symbols extraction and collected daily stock prices from CRSP database
- Resolved imbalanced data model evaluation with macro F1 score metric and achieved **78%** on macro F1 score of logistic regression model by tuning threshold

### News Recommender Engine

Aug. 2021 — Dec. 2021

- Aggregated and prepped news data using Pandas from **4** independent news sources into Python SQLite database and extracted news information through NLP techniques
- Developed a news recommender engine with an **85%** average matching rate by applying a combined content-based filtering algorithm with TF-IDF and Word2Vec

### CAPTCHA Identification System

Mar. 2021 — Jun. 2021

- Increased web scraping process speed by **10 times** by developing an automatic digit/letter identification system with CNN and RNN models using Pytorch
- Enhanced the recognition accuracy by **15%** by implementing image noise reduction using NumPy and OpenCV

## LEADERSHIP & ACTIVITIES

### NCTU Cheerleading - Course Coordinator

Sep. 2017 — Jun. 2018

- Managed a club of **50+** members and scheduled progress weekly, saving average preparation time by **1 week**
- Boosted exposure and the number of commercial performances by **20%** by collaborating and communicating with other college cheerleading