

# Chi Yun Chen

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## EDUCATION

### MS, Data Analytics, CS track ♦ The George Washington University

Washington, D.C., US

- Courses: Machine Learning, Statistics, Big Data, Database Management, Algorithms, Marketing Analysis, etc.
- Honors: Fellowship funding & Best ML/AI approach prize in 2021 GW Hackathon.

Expected Dec 2022

### BS, Food Science and Biotechnology ♦ National Chung Hsing University

Taichung, Taiwan

- Courses: Statistic Methods and Data Analysis, Game Theory, etc.

Jan 2016

## EXPERIENCE

### Data Scientist Intern

California, US

Beagle Technology Inc.

May 2022 – present

- Collaborate with robotic team to build a real-time YOLOv4 object detection model and optimize recall by 16% with PyTorch.
- Develop data infrastructure and schema of RDB with Python and Google Cloud SQL, resulting in a 20% ETL processing time reduction.
- Manage Google Cloud Storage and create a dashboard with PostgreSQL to deliver quantitative analysis for cross- team project management.
- Program automatized data pipeline, such as pre-labeling function, for image segmentation model in computer vision model with Python.

### Data Analyst, I.T. Administration

Washington, D.C., US

The George Washington University

Feb 2022 – Aug 2022

- Collected, organized, and wrangled the I.T. data among 6,000 staff, then validated data integrity with Excel and Python.
- Analyzed I.T. data with Excel Pivot Table, meanwhile generating a performance dashboard with insight to support project management.

### Data Intern

Virginia, US

iChemLabs LLC.

Jul 2020 – Sep 2021

- Evaluated thousands of chemical compound data and wrote testing cases to validate with Java.

### Research Assistant, Pharmaceutical Department

Taipei, Taiwan

National Yang Ming University

Jul 2018 – Aug 2019

- Designed biotechnology experiments and statistics model, then analyzed data with Excel and R on nanoparticles in cancer therapy.
- Leveraged experimental data to develop research methods in custom-made quantitative frameworks.

### Project Manager and Data Analyst

Taipei, Taiwan

Innovation Open House

Jan 2016 – Jul 2017

- Established a relational database from scratch and systematized data storage by setting up a NAS system for a startup company.
- Scoped product data with SQL and Excel, then reduced 20% turnaround times by creating an automatic performance evaluation system.
- Designed and maintained KPI dashboards with Excel and Tableau among 20 interns to support team management and led the orientation.
- Utilized statistical methods and Excel pivot table to execute marketing campaigns and increased engagements of the FB Fan Page by 30%.
- Partnered with marketing team to inspect website performance data with GA and executed SEO, resulting in 74% sessions increased.
- Implemented A/B testing for video product improvement, resulting in a 200% improvement in average view duration.
- Coordinated and led a cross-functional team 3 times for a live-stream event that owns tens of thousands of audiences.

## SKILLS

### Programming Languages:

- Proficient: Python (*NumPy, pandas, SciPy, TensorFlow, PyTorch, scikit-learn, etc.*), SQL.
- Advanced: R (*Dplyr, Knitr, Shiny, RMarkdown, etc.*).
- Prior Experience: Java, JavaScript, HTML.

### Languages:

- Professional/ Native: English, Chinese.
- Intermediate: German.
- Beginner: Spanish.

### Data Science & Miscellaneous Technologies:

- Data Science Pipeline: Data Processing, Cleaning, Wrangling, Modeling, Interpretation, Exploratory Data Analysis, and ETL Pipelines.
- Data Visualization: Python (*matplotlib, seaborn*), R (*ggplot2*), Tableau, QGIS.
- Statistics Analysis: Regression Analysis, Cluster Analysis, ANOVA, PCA, Time Series, A/B Testing, MATLAB, Google Analytics, Excel.
- Others: Machine Learning, Natural Language Processing, Text Processing, Topic Modeling, Deep Learning.

**Big Data & Database Management:** MySQL, PostgreSQL, MongoDB, Neo4j, MLaaS (*AWS, Google Cloud*).

## PROJECTS

### American Sign Language Translation Approach by Machine Learning with Python

[bit.ly/SL\\_medium](https://bit.ly/SL_medium)

- Regulated motion capture and computer vision recognition module with OpenCV and Mediapipe libraries.
- Built Deep an Encoder-Decoder Seq2Seq Model and Convolution 3D Classification deep learning with PyTorch.

### Analysis of COVID-19 Topic on Facebook/Twitter in LDA Evaluation Metrics by PCA

[bit.ly/LDA\\_dan\\_21](https://bit.ly/LDA_dan_21)

- Extracted data from open API and deployed topic modeling and Latent Dirichlet Allocation (LDA) on NLP studies with Python.

### Exploratory Data Analysis Repository Using Statistical and Machine Learning Methods with Python

[bit.ly/EDA\\_github](https://bit.ly/EDA_github)

- Developed data pipeline and ETL process for various datasets, which includes time series, statistics analysis, and prediction modeling.

### Analytic SQL Database Management and Recommendation Function of Yelp Dataset

[bit.ly/yelp\\_github](https://bit.ly/yelp_github)

- Restructured dataset schema into AWS RDS and Python SQL libraries, then constructed recommendation function with ML/DL models.