

CHI (YUKI) YU
Cambridge, MA
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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Candidate for Master of Analytics, Operations Research Center, August 2025

Cambridge, MA

2024 – Expected Aug 2025

- Coursework: Machine Learning, Optimization Methods, Analytics Edge
- ML Project: Classification modeling and designing recommendation systems for health news tweets (Python)
- Optimization Project: Optimizing EV charging station placements & charger allocations in Boston (Python, Julia)

UNIVERSITY OF CALIFORNIA, LOS ANGELES

B.S. Mathematics/Applied and B.S. Statistics & Data Science

Los Angeles, CA

2020 - 2024

- Coursework: C++, Stochastic Processes, Monte Carlo Methods, Probability, Statistical Models & Data Mining
- Awards: ASA 2023 DataFest – Judge's Choice Winner out of 80 teams
- Clubs: Korean American Student Association – Mentored freshmen and transfer students transitioning to UCLA

TECHNICAL SKILLS

- Python, R, SQL, PySpark, Julia, SAS, C++, MATLAB

EXPERIENCE

MIT SLOAN | COMCAST

Cambridge, MA / Philadelphia, PA

Data Scientist | Capstone Project Team Member

Spring 2025 - Present

- Leveraging Natural Language Processing (NLP), Large Language Models (LLMs) to analyze real-time customer interactions in calls and optimize engagement strategies
- Implementing Retrieval-Augmented Generation (RAG) to identify customer issues in live calls and automate solution recommendations to improve customer satisfaction and reduce agent workload (Python, PySpark)

MIT SLOAN | CMA CGM

Cambridge, MA

Data Scientist | Analytics Lab Team Member

Fall 2024

- Forecasted U.S. import trends across 6 regions and 4 products using machine learning algorithms ARIMA, SARIMAX, XGBoost, and Random Forest, improving operational efficiency and strategic planning (Python, R)
- Created data-driven reports and presented insights to non-technical supervisors, ensuring data accessibility and informed decision-making

ACADEMIA SINICA, INSTITUTE OF PHYSICS

Taipei, Taiwan

Research Intern

Summer 2023

- Refined a mathematical model of biofilm oscillations, using ODE modeling and RK4 solvers to enhance predictions of microbial behavior relevant to infection control (Python)
- Simulated the dynamics and behavior of individual-based biofilm models, providing insights into microbial interactions and biofilm development under varying conditions (NetLogo)

MECHANICS BANK AUTO FINANCE

Irvine, CA

Auto Risk Analyst (Part-Time)

2022 - 2023

- Developed an originations scorecard in a two-person team, completing most of the model building under mentor guidance to reduce overallocation risks and optimize resources for bank expansion
- Processed large-scale transactional data to create a development database for the scorecard (SAS, SQL, Excel)
- Built a logistic regression inference model to identify key predictors for risk assessment, optimizing resource allocation and improve decision-making (SQL, SAS)

Auto Risk Intern

Summer 2022

- Conducted stability testing on fraud detection models, ensuring model robustness with real-world data (SAS, SQL)
- Designed a quarterly monitoring framework for a loss forecast model, including backtesting, stability testing, and stress testing (SAS, SQL, Excel)

ADDITIONAL INFORMATION

- Language: Mandarin Chinese (native), Japanese (Conversational)
- Permanent Resident: Full Work Authorization
- Interests: Basketball, Piano, Baking