

# Yu Cheng

✉ yu@yu-cheng.co  
🐙 github.com/fischcheng  
🌐 yu-cheng-boston  
☎ (786) 503-3366

## PROFILE

Driven Data Scientist with a strong background in machine learning algorithms, predictive modeling, and data analysis. Proven success in assembling and analyzing data sets from diverse sources, developing data pipelines, and effectively communicating complex findings to non-technical audiences.

## EDUCATION

### University of Miami

PhD in Meteorology and Physical Oceanography, 2018

### National Taiwan University

Bachelor of Science in Atmospheric Sciences, 2010

## SOFT SKILLS

- Oral and written communication
- Creative problem-solving
- Research project management

## TECHNICAL SKILLS

- Advanced Analytics
- Machine/Deep Learning: Scikit-Learn, PyTorch
- Languages: Python (numpy, pandas, matplotlib), SQL
- Workflow: Airflow, Docker, Kubernetes, dagster
- Cloud: Google Cloud Platform, BigQuery, AWS, SageMaker

## CERTIFICATES

- [Deep Learning Specialization](#)
- [AWS Certified Machine Learning – Specialty](#)

05.18.2023

## PROJECTS

### Dashboard of Dark Ship Detection and Monitoring

Orchestrated a CNN-based illegal fishing vessels detection and labeling system, designing and implementing end-to-end data workflows for large-scale data ingestion, processing, tagging, and publishing.

### Wildfires and climate change

explored the relationships between wildfires and climate variables, using [Jupyterlab](#) and [matplotlib](#). Preliminary results showed that the wildfire season over the western U.S. has extended by nearly 70 days since 1980s. [\[blog post\]](#)

## EXPERIENCE

### Web3 Builders

Founding Senior Data Scientist

2022 - Present

Boston, MA

- Integrated disparate data sources to develop labeled datasets for ML models, predicting scam probabilities. Established ETL and ML pipelines using cloud infrastructures.

### SFL Scientific (acquired by Deloitte)

Senior Data Scientist

2021 – 2022

Quincy, MA

- Implemented and deployed ML solutions tailored to Fortune 500 clients' objectives, resulting in improved business performance through meticulous exploratory analysis, metric definition, and continuous evaluation of data science life-cycle outcomes.

### Tomorrow.io

Senior Atmospheric Data Scientist

2018 – 2021

Boston, MA

- Created novel weather products by integrating computer vision and ML techniques, resulting in a near real-time global precipitation pipeline using geostationary satellite images and cloud-based technologies using [Google Cloud Platform](#), [xarray](#), [dask](#) and [satpy](#). [\[blog post\]](#)

### RSMAS, University of Miami

Research Assistant

2012 – 2018

Coral Gables, FL

- Explored Agulhas Leakage variability through a state-of-the-art high-resolution climate model using Lagrangian particle analysis and open-source software including [PyData stack](#) ([pandas](#), [numpy](#), [matplotlib](#), [xarray](#), [jupyter](#)), [CDO](#) and [NCL](#), resulting in 4 peer-reviewed articles.