YING HIU LI, PH.D.

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Ph.D. in Entomology with 7+ years experience in data pipelines and analysis. Proven scientific track record with 6 peer-reviewed publications; experienced in leading teams and collaborative work. Creative, results-driven, productive.

TECHNICAL SKILLS

Data infrastructure
- Airflow (Python)
- SQLAlchemy ORM
- Relational databases
- Package management (pip)

Cloud computing
- Google Cloud Platform (GCP)
- AWS (EC2, S3, cli)
- Kubernetes

Analysis
- Looker, Tableau
- Matplotlib, Pandas, NumPy
- Jupyter Notebook

Collaborative space
- Git/Github/Gitlab
- JIRA
- Docusaurus (React)
- Screwdriver CI/CD

EXPERIENCE

Data Engineer
Calico Life Sciences, *South San Francisco, CA* **(2021 - Present)**
- Designed and implemented automated workflows of biological data using Airflow and Kubernetes on Google Cloud Platform (GCP); collaboration alongside scientific researchers to analyze large datasets

Data Engineer
SymphonyRM, *Palo Alto, CA* **(2019 - 2021)**
- Scrum master in a Kanban-style Agile environment (JIRA) and documentation on Confluence
- Architected and deployed automated batch ETL processing of 100+ unique data sources on AWS using Airflow, increasing performance time by 12% and resulting in est. $200K AMR
- Implemented file tracking system to track and monitor 100+ flat files across many servers (SFTP, S3) to increase visibility and standardize file ingestion, which streamlined batch processing and reduced technical debt

Discovery Oncology Researcher, Intern
Genentech, Inc., *South San Francisco, CA* **(Jun - Oct 2018)**
- Led research on examining the role of a DNA helicase contributing to DNA mismatch repair defective cancers
- Optimized protocol using automated high-throughput screening to image and score DNA damage in cancer cells

Graduate Student Researcher | Ethnic Studies TA
UC Davis, *Davis, CA* **(2014 - 2018)**
- Led, developed, and executed research on understanding how nutrient-dependent signaling can regulate the circadian clock; resulted in first-author publication in *PLoS Genetics*
- Built in-house Python programs to automate research analysis pipeline and created metrics for DNA analysis
- Secured over $8000 research funding; presented 20-minute talk at a scientific conference with over 6000 attendees

Staff Research Associate | Junior Research Specialist
UC Davis, *Davis, CA* **(2010 - 2014)**

SELECTED PUBLICATIONS

Li, Y.H., Liu, X., Zheng, H., Vanselow, J.T., Schlosser, A. Chiu, J.C. 2019. O-GlcNAcylation of PERIOD regulates its interaction with CLOCK and timing of circadian transcriptional repression. *PLoS Genetics.* https://doi.org/10.1371/journal.pgen.1007953

Liu, X., ...**Li, Y.H,** et al. 2021. Hexosamine biosynthetic pathway and O-GlcNAc-processing enzymes regulate daily rhythms in protein O-GlcNAcylation. *Nature Communications*. https://www.nature.com/articles/s41467-021-24301-7

EDUCATION

Data Analytics & Visualization Bootcamp Certification - UC Berkeley Extension
Ph.D. in Entomology, Designated emphasis in Biotechnology - UC Davis
B.S. in Biotechnology, Emphasis in Fermentation/Microbiology - UC Davis

HOBBIES

Freelance web design
Snowboarding
Photography