Ya-Lin Chen (Amber)

+1 (206) 786 8415
Email: ychen124@uw.edu
LinkedIn: www.linkedin.com/in/yalinchen-amber
Personal blog: https://bionewsdigest.medium.com/
GitHub: https://github.com/ambercheny

Summary

Interdisciplinary education background in PharmD and bioinformatics. Trained in several statistical and big data analysis programs. Experienced in Artificial Intelligence healthcare products, creating safety solutions for the healthcare x AI industry.

Awards

2024.09 – 2026.05 **Study Abroad Scholarship, Ministry of Education, Taiwan**
Awarded for graduate study abroad, funded by the Taiwanese Ministry of Education

2022.09 - 2024.08 **Fulbright Grantee**
Selected as a Fulbright Grantee from Taiwan to pursue advanced education in the United States.

Education

2022.09 - present **Ph.D. of Biomedical Informatics and Medical Education in progress**
Department of Biomedical Informatics and Medical Education, University of Washington

2020.09 - 2022.06 **Master of Science of Biomedical Informatics**
Graduate Institute of Biomedical Informatics, Taipei Medical University
Thesis advisors: Prof. Der-Ming Liou, Prof. Hsuan-Chia Yang, Taipei Medical University

2014.09 - 2020.06 **Doctor of Pharmacy**
Clinical Program, School of Pharmacy, College of Pharmacy, Taipei Medical University

Professional Experience

2024.09 - present **Research Assistant**
Department of Laboratory and Pathology, University of Washington, Foy Lab
Developing methods for deep hematologic phenotyping using flow cytometry data, electronic health record data mining, creating SQL data pipeline for data cleaning and transformation, building deep learning models for single-cell data

2024.02 - 2024.07 **Clinical Informaticist**
Institute for Systems Biology
Electronic health record data mining, reating and validating computational phenotypes, medication-related feature validation, survival analysis and prediction, chart abstraction

2022.10 - 2023.10 **Informatics Pharmacist**
AESOP Technology
AESOP Technology is a company dedicated to developing electronic clinical decision support systems for prescription evaluation to reduce medication errors. As an informatics pharmacist, I validated medication features and collarborated with developers to design algorithms.

2015.09 – 2022.06 **Teaching Assistant**
Graduate Institute of Biomedical Informatics
College of interdisciplinary studies, Taipei Medical University
Center for General Education, TMU
Assisted courses of English writing and debate, medical device design thinking, introduction to biomedical informatics, Python, etc.

2021.08 - 2021.10 **Community Pharmacist**
MedFirst Healthcare Services, Inc.
Experienced in patient counseling of medical devices and medications.

2019.08 - 2020.05 **Hospital Pharmacist Intern**
Taipei Medical University Hospital. Shuang Ho Hospital, Wanfang Hospital
Advanced pharmacy practice experiences, including Oncology, Intensive Care Unit, Pediatrics and Neonatology, Infection, Ambulatory Care, Internal Medicine, and Academics.

Publications

2025.11 Harish, N., Zhang, C., **Chen, Y.-L.**, & Foy, B. H. (2025). *Using routine laboratory tests to perform early prediction of urine culture results* (p. 2025.11.24.25340905). medRxiv. https://doi.org/10.1101/2025.11.24.25340905

2025.11 **Chen, Y.-L.**, Lucas, F., & Foy, B. H. (2025). Leveraging Hematologic Single-Cell Measurements for Patient Triage and Outcome Prediction. *The Journal of Applied Laboratory Medicine*, *10*(6), 1600–1606. https://doi.org/10.1093/jalm/jfaf127

2025.01 Dorosan, M.[#], **Chen, Y.-L.**[#], Zhuang, Q., & Lam, S. W. S. (2025). In Silico Evaluation of Algorithm-Based Clinical Decision Support Systems: Protocol for a Scoping Review. *JMIR Research Protocols*, *14*(1), e63875. https://doi.org/10.2196/63875. #: equal contribution

2024.05 **Chen, Y. -L.**, Dorosan, M., Zhuang Q., Lam, S. S. W. (2024) Evaluating AI Models through In Silico Simulations for Clinical Workflow Integration: Preliminary Results of a Scoping Review. American Medical Informatics Association Clinical Informatics Conference

2023.12 **Chen, Y. -L.**, Nguyen, P.-A., Chien, C.-H., Hsu, M.-H., Liou, D.-M., & Yang, H.-C. (2023). Machine learning-based prediction of medication refill adherence among first-time insulin users with type 2 diabetes. Diabetes research and clinical practice, 207, 111033. Advance online publication. https://doi.org/10.1016/j.diabres.2023.111033

2023.10 Chen, C., **Chen, Y.-L.**, Scholl, J., Yang, H.-C., & Li, Y.-C. J. (2023). Ability of machine-learning based clinical decision support system to reduce alert fatigue, wrong-drug errors, and alert users about look alike, sound alike medication. Computer Methods and Programs in Biomedicine, 107869. https://doi.org/10.1016/j.cmpb.2023.107869

2023.05 **Chen, Y.-L.** (2023). Combining Sequence Similarity with Physicochemical Properties to Predict Binders for MHC-II Molecules. Studies in Health Technology and Informatics, 302, 1067–1068. https://doi.org/10.3233/SHTI230348

2022.08 **Chen, Y.-L.**, Satria, F. B., Jamshed, S., Babar, Z.-U.-D., Mukherjee, N., Yang, H.-C., Li, Y.-C., & Iqbal, U. (2022). Personal health records - Potential one-stop approach in polypharmacy. Computer Methods and Programs in Biomedicine Update, 2, 100063. https://doi.org/https://doi.org/10.1016/j.cmpbup.2022.100063

2022.03 Chien, S.-C., **Chen, Y.-L.**, Chien, C.-H., Chin, Y.-P., Yoon, C. H., Chen, C.-Y., Yang, H.-C., & Li, Y.-C. (2022). Alerts in Clinical Decision Support Systems (CDSS): A Bibliometric Review and Content Analysis. Healthcare, 10(4), 601. https://www.mdpi.com/2227-9032/10/4/601

2021.10 **Chen, Y. -L.**, Yang, H.-C. L, & Liou, D. -M. (2021). Localize the Implementation of FDA List of Confusable Drug Names with the Application of Taiwan National Health Insurance Database: A Study of Text Similarity Computation with Real-World Data. American Medical Informatics Association Annual Symposium

2020.11 Sufriyana, -H., Husnayain, -A., **Chen, Y. -L.**, Kuo, C. -Y., Singh, -O., Yeh, T. -Y., Wu, Y. -W., & Su, E. -C. (2020). Comparison of Multivariable Logistic Regression and Other Machine Learning Algorithms for Prognostic Prediction Studies in Pregnancy Care: Systematic Review and Meta-Analysis. JMIR Med Inform, 8(11), e16503. https://doi.org/10.2196/16503

Qualifications & Skills

Statistical Software Python, R, SQL, SAS, SPSS, C++

Medical Profession National Pharmacist License

Cloud Computing AWS EC2

Volenteer Experience

2025.03 - present

Safety Committee Member

Hadlock lab, Institute for Systems Biology

Served as the primary liaison between the Hadlock Lab and the ISB Safety Committee, ensuring lab-wide alignment with institutional protocols and safety standards.

2023 - present

American Medical Informatics Association Volunteer

Led the literature synthesis for the AMIA Year-In-Review, evaluating 100+ papers to provide the informatics community with a strategic roadmap of key industry shifts.

2024.03 **Global Business Case Competition Volunteer**

Foster School of Business, University of Washginton

Streamlined the event flow for global business finals, coordinating time-sensitive pitch schedules and technical requirements.

Interdisciplinary Experience

2020.02 - 2020.03 **Project Manager Intern**

Taiwan Digital Diplomacy Association

- Norway student project: led a team of 20 people and facilitated citizen diplomacy between Norway and Taiwan.
- Vietnam medical project: managed an official Facebook page about medical knowledge in collaboration with 4 graphical designers and 2 Vietnamese translators.

2015.09 - 2019.06 **International Professor Host (Part-time)**

College of Pharmacy, TMU

Escorted international guests with translation service.

2018.06 - 2018.12 **Digi+ Talent Accelerator & Jumpstart Program**

Industrial Development Bureau, Ministry of Economic Affair

In this six-month program, I worked in a group of four and mentors at Chung-Hua Institution for Economic Research. We made a nonexhaustive report on"Internet of Things in Healthcare", covering a couple of aspects, such as an introduction to the Internet of Things (IoT), current IoT applications in healthcare services, and the challenges of the implementation.

2018.05 - 2018.06 **Stanford-Taiwan Biomedical Bootcamp**

Taipei Medical University

I was elected as a clinical observer to conduct the first-in-time medical device development project at TMU. In this project, we went through the complete process of finding medical needs for patients with obstructive sleep apnea. At the end of the project, I represented the group to present the result at BE Accelerator pitch event in November 2018.

2016.10 - 2017.09 **Contact Person**

Pharmaceutical Students' Association of Taiwan, International Pharmaceutical Students Federation

As a Contact Person, I represented Pharmaceutical Students' Association of Taiwan in the global pharmacy student association, International Pharmaceutical Students Federation, with various responsibilities. During my mandate, I collaborated with Japan and South Korea and hosted the first reginonal Patient Counseling Event. I also represented Taiwan to participate in the World Congress of International Pharmaceutical Students Federation.

2016.07 - 2016.08 **Regulatory Science Summer Program**

University of Southern California

During this one-month summer program, we learned about the regulatory science of medications and medical devices with international perspectives, including regulations from the United States, Taiwan, China, and South Korea.