

Pei-Yu (Lucy) Chen

Education

Master in Computer Science (Align) <i>Northeastern University, Seattle, WA</i>	Sep. 2024 - Dec. 2026
Bachelor in Economics <i>National Taiwan University, Taipei, Taiwan (NTU, ranked #1 in Taiwan)</i>	Sep. 2018 - Aug. 2022
<ul style="list-style-type: none">Relevant Courses<ul style="list-style-type: none">Statistical Learning and Deep Learning (A+)Data Science and Social Inquiry (A+)Exchange Program: Department of Economics, University of Mannheim, Germany	
	Feb. 2022 - Jun. 2022

Projects

Object-Oriented Design Team Management for Roles, Status, and Members [Python][Code]	Oct. 2024
<ul style="list-style-type: none">Constructed 4 classes to enable interactive team management with player validation, FIFO benching, and roster displayDeveloped validation checks to ensure correct inputs and prevent improper and duplicate modificationsThis program can also be applied to other management settings such as project teams and school clubs	
Responsive Personal Website [HTML, CSS, JavaScript] [Website]	Oct. 2024
Housing Prices Prediction with Street Scenes [Python] [Code]	Sep. 2021 - Jan. 2022
<ul style="list-style-type: none">Incorporated the refined street scene features into a housing price prediction model and researched on the relationship between housing prices and street scenesImage Request: Requested street images from Google Static Street View API and extracted image featuresModel Construction: Applied a pre-trained VGG16 model (convolutional neural network (CNN) architecture) to extract image features, ensuring the generality by freezing earlier layers and excluding the last layerOptimization: Refined the extracted features (dimension reduction) by parameter search loops and evaluating with Random Forest RegressionUtilized Python packages: Requests, PIL, Tensorflow, Pytorch, Scikit-Learn, Pandas	

Awarded Project

Y.L. Lin Hung Tai Education Foundation – NTU Scholarships	Jul. 2021 - Sep. 2023
<ul style="list-style-type: none">Scholarship of NTD 450K (≈USD 15K), sponsoring my social initiative and international exchangeImplemented the Indonesian-Chinese Platform [Website] and engaged thousands of people via online channels	

Professional Experience

Application Consultant <i>IBM Consulting Taiwan, Customer Transformation (Banking Industry Focus)</i>	Aug. 2022 - Sep. 2023
<ul style="list-style-type: none">Managed documentation and development of 20+ crucial functions of Mobile Bank, such as Account Balance, Transaction Records, Currency Exchange Rates, Credit Card Installment PaymentCollaborated with 6 Developers to design the system given client-side APIs and optimized database operationsCooperated with 4 UI/UX Designers to craft functional and user-friendly mobile banking interfacesFacilitated communication across 2 departments on client side with 10+ internal developers and designers	
QA Intern <i>Shopee Taiwan, Operations - Tech Team</i>	Jul. 2021 - Jan. 2022
<ul style="list-style-type: none">Supported to the supply chain platform development through Product Requirements Document enhancementsAnalyzed data with nested SQL queries, contributing to informed decision-making	

Leadership & Service

President <i>NTU Symphony Orchestra (88 members)</i>	Aug. 2019 - Feb. 2020
<ul style="list-style-type: none">Initiated a 15-day Europe Concert Tour, sponsored by alumni and companies (canceled due to Covid-19)Hosted a concert at the National Concert Hall [Video] with 1,000 attendees, generating NTD 300K (≈USD 10K)Organized on-campus activities: orientation, Christmas activities, and a charity performance at NTU Hospital	
Volunteer <i>NTU Shanfu (organizing educational camps during summer/winter vacation in mountain areas)</i>	Feb. 2019 - Aug. 2019
<ul style="list-style-type: none">Created materials and organized activities for a tribal community in Taitung CountyLectured science classes during a two-week summer camp for 20 aboriginal children	