

Ik Teng Liaw

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EDUCATION

University of Wisconsin – Madison (USA)

Sep 2023 – May 2025

Bachelor of Science in Computer Science
CGPA: 3.57/4.00

Relevant Coursework: Introduction to AI, Introduction to Computer Engineering, Machine Organization & Programming, Introduction to Algorithms, Introduction to Human-Computer Interaction, Elementary Matrix & Linear Algebra, Introduction to Big Data Systems, Introduction to Operating Systems, Software Engineering, Autonomous Robotics, CS Capstone

Sunway University (Malaysia)

Jan 2022 – Aug 2023

American Degree Transfer Program
CGPA: 3.48/4.00

Relevant Coursework: Programming I-III, Introduction to Discrete Mathematics, Calculus & Analytic Geometry I & II, Calculus-Functions of Variables, Introduction to Probability & Mathematical Statistics I

SKILLS

- **Programming Languages:** Python, Java, JavaScript, MATLAB
- **Web Development:** HTML, CSS, Flask, React
- **Frameworks & Libraries:** PyTorch, TensorFlow, Keras, Scikit-learn, Matplotlib, Seaborn
- **Development & Design Tools:** Figma, Canva, Microsoft Office Suite
- **Languages:** English, Chinese
- **Soft Skills:** Critical thinking, Effective communication, Team Collaboration, Problem-solving

PROJECTS

Customer Churn Prediction Platform, UW-Madison Capstone Project - NUUMobile

<https://github.com/ACarrig/NUUMobile1>

- Designed and developed a full-stack churn prediction platform with a React frontend and Flask backend, enabling multi-file Excel uploads and real-time predictions.
- Built interactive dashboards featuring tabbed summaries, dynamic plotting tools, and AI-generated return analyses to enhance data exploration and usability.
- Developed and trained churn models, including an XGBoost model and a stacking ensemble (XGBoost, Random Forest, Logistic Regression, Gradient Boosting), and integrated them into the platform to allow users to upload data, select models, generate churn predictions, visualize results, and download outcomes.

RSNA Pneumonia Detection Project

<https://github.com/ikteng/RSNA-Pneumonia-Detection-Project>

- Built a DenseNet model to detect pneumonia from chest X-ray images.
- Preprocessed and augmented DICOM images, addressing class imbalance using SMOTE.
- Achieved 85% accuracy, evaluating model performance with precision, recall, F1-score, and AUC.
- Generated test predictions based on the trained model.

IMDb Movie Review Sentiment Analysis

https://github.com/ikteng/Movie_Reviews

- Classified IMDb movie reviews as positive or negative using Naive Bayes and deep learning models.
- Preprocessed text data through tokenization, punctuation removal, and padding.
- Achieved 85% accuracy with Naive Bayes and 84.92% with a deep learning model.
- Evaluated model performance with accuracy and classification reports, enabling sentiment prediction for new reviews.

Age and Gender Predictor

<https://github.com/ikteng/Age-and-Gender-Predictor>

- Built CNN models to predict age (regression) and gender (classification) from facial images or video capture using the UTKFace dataset.
- Preprocessed over 20,000 labeled images with data augmentation, balancing techniques, and model regularization using Keras callbacks.
- Integrated real-time webcam prediction using OpenCV and Haar cascade face detection to display bounding boxes with age and gender labels.
- Saved and deployed models for offline and live inference, enabling interactive facial analysis applications.

LEADERSHIP EXPERIENCE & CAMPUS INVOLVEMENT

Member, AI@UW

Aug 2024 – May 2025

- Collaborated with students from diverse academic backgrounds in a community-centered environment.
- Gained hands-on experience applying AI techniques and tools to real-world problems.
- Engaged with a variety of AI topics, including the relationship between neuroscience and AI.

Member, Rotaract Club of Sunway University

Sep 2022 – Aug 2023

- Assisted in organizing the Sunway MS Charity Walk, helping to raise awareness and funds for the Multiple Sclerosis Society in Malaysia, with over 60 volunteers participating.
- Supported the promotion and coordination of the EDURACT tutoring project, facilitating weekly lessons that aimed to improve academic outcomes for underprivileged children in the community.
- Actively participated in monthly meetings, contributing ideas and collaborating with fellow members to enhance community service initiatives.

ACHIEVEMENTS

- Certificate of Academic Honors: Summa Cum Laude (Jan – May 2023)
- Certificate of Academic Honors: Cum Laude (Aug – Dec 2022)
- Jeffrey Cheah Entrance Scholarship Recipient (2022)