Leadership and Awards

- Promoted among managers of 20+ at NETGEAR for leading 10+ software engineers to develop data analytics projects, deploying them to production, and providing insights for several teams at the company. Key projects include:
  - *Wi-Fi Connection Analytics:* accelerated the support team's remote troubleshooting process for wireless connection failures through the visualization of wireless data.
  - *Onboarding Method Analytics*: guided the campaign strategies for the marketing teams by identifying customers' preferred engagement channels and frequencies.
- Managed teams of 15+ members, including R&D, QA, UI/UX, PM, and Marketing, at Foxit Software, bringing the AI contract review service, ***iDox.ai***, to market in six months.

Projects (GitHub)

Explainable Machine Learning – Predicting Donations upon Receiving Mail Offers

- Compared the performance of EBM and GBM in different feature selection settings for predicting donors in the KDD Cup 1998 dataset.
- Investigated the monotonic relationships between EBM's top influencing variables and the response for interpretability.

Impact of Superhost on the Annual Revenue of Listings on Airbnb

- Analyzed the causal effects between a listing's annual revenue and its host, as well as other factors in the hospitality industry.
- Performed data cleaning, wrangling, statistical modeling, and visualization on a geospatial dataset using Python.

Customer Segmentation and Churn Prediction for Payment Transaction Service

- Classified customers into four categories by applying an RFM framework based on engagement and lifetime value (LTV).
- Predicted the potential churn according to business context by utilizing Semi-supervised Learning methods.

Personalized Product Recommender

- Built an online recommendation system and achieved a 74% accuracy on a 1M-observation like-unlike dataset.
- Utilized collaborative filtering with Pandas to calculate similarity scores among users.

IoT Risk Identification and Prevention Framework – Mobile Auth for Wi-Fi Access

- Developed a risk score profile for each connected IoT device using its 2FA phone number and machine learning.
- Synthesized a Wi-Fi access dataset with annotated labels using clustering and outlier detection algorithms.

Education

Duke University, Durham, NC, ***Master of Interdisciplinary Data Science (MIDS)***; **GPA: 3.8/4.0** **Expected May 2023**

National Taiwan University, Taiwan, *Master of Computer Networking & Telecommunication* Jan. 2011

Knowledge and Skills

Data Science Machine Learning, Statistical Modeling/Inference, Hypothesis Testing, Causal Inference, Algorithmic Trading, Deep Learning, Computer Vision, Natural Language Processing, AWS, Azure, CI/CD, DevOps, MLOps.

Product SaaS, Experimentation and A/B Testing, Data Visualization and Storytelling, Product Management, Agile/Scrum Development, API Development, Tech Spec Design, User Growth, Customer Lifetime Value (LTV), SEO, UI/UX.

IoT and Cybersecurity Wireless Communication, Network Protocols (OSI Model 7 Layers), Digital Identification, Two/Multi-factor Authentication (2FA/MFA).

Programming Python (scikit-learn, PyTorch), SQL, R, C++/C.

Tools Tableau, Databricks AutoML, Docker, Google Analytics, Jira, Confluence, Microsoft Office Suite.