- Translated customers' needs from internal/external channels into roadmaps of software features and UI/UX enhancements, come out with the development plans, and drove teams cross-functionally to meet schedules.
- Delivered <u>30+ technical presentations to executives, technical/non-technical stakeholders, and reseller partners worldwide</u> and ensured product highlights are well-absorbed.

TOPVIEW | *Software Engineer - IP Camera*　　　　　　　　　　　Mar. 2014 ~ Mar. 2015, Taiwan

REALTEK Semiconductor | *Firmware Engineer - Wi-Fi ROUTER*　　　　　Jun. 2012 ~ Oct. 2013, Taiwan

Projects ([GitHub](#))

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

- Calculated <u>risk scores</u> of IoT devices using machine learning and created a <u>risk profile with their 2FA phone numbers</u>.
- <u>Synthesized a Wi-Fi access dataset</u> and labeled it with <u>clustering algorithms and outlier detection</u> packages in Python.

Impact of Superhost on the Annual Revenue of Listings on Airbnb

- <u>Investigated causal effects</u> between a listing's revenue and its host as well as other features in the hospitality industry.
- Performed data wrangling, <u>matching, statistical modeling</u>, and visualization using Python on a geospatial dataset.

Customer Segmentation and Churn Prediction for Payment Transaction Service

- Applied the <u>RFM framework</u> to separate customers into four categories by their engagement and value for the service.
- <u>Identified criteria of the potential churn</u> with Semi-supervised Learning and predicted according to business context.

Personalized Product Recommendation

- Built an <u>online recommendation system</u> to suggest customized items based on a 1M-observation like-unlike dataset.
- Applied <u>Collaborative Filtering</u> to calculate similarity scores among users using Pandas and achieved a 74% accuracy.

Wi-Fi Router Analytics

- Accelerated NETGEAR's remote troubleshooting process on Wi-Fi connection issues by <u>visualizing wireless data with Tableau and extracting insights</u> to stimulate engineering improvement for all Wi-Fi router product lines.

Expertise & Skills

Data Science Machine Learning, Statistical Modeling, Hypothesis Testing, Causal Inference, Deep Learning, Computer Vision, Natural Language Processing, AWS, Azure, Databricks, DevOps, MLOps.

Product Experimentation and A/B Testing, Data Visualization and Storytelling, SaaS, APIs, Tech Spec Design, Product Management, Agile/Scrum Development, UI/UX, Marketing Analytics, GTM, User Growth, SEO.

IoT and Cybersecurity Wireless Communication (Wi-Fi, Cellular Networks), Embedded Linux System, Software/Firmware Development, Two (Multi)-factor Authentication (2FA/MFA).

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

Tools Tableau, Git, Docker, Google Analytics, Jira, Confluence, Microsoft Office Suite (Excel, PPT).