

# Jessie Chia Hsuan Lee

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Portfolio: <https://www.jessiechlee.com/>

## CAREER PROFILE

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With 3 years of product management experience in the biotech sector, specifically in the dietary supplement and skincare industry, I led the development and implementation of crucial enterprise tools. This includes a CRM system, Lead Tracking apps, and an Integrated Product Development Knowledge Hub, which collectively led to operational cost savings of 6.5 million USD within 3 years. Furthermore, I contributed to new business opportunities that resulted in an additional 1.8 million USD in revenue. I also bring to the table 2+ years of pre-clinical colon cancer research experience, which enriches my ability to drive product development in the intersection of life sciences and technology.

Core competencies: Product Management, Digital Transformation in Biotech, Business Strategy, Market Research, Application of Machine Learning in Life Sciences, and Life Science & Healthcare Domain Knowledge.

## CAREER HIGHLIGHTS

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- Led a cross-functional team to integrate individual systems (product development, research and development, procurement, Customer Relationship Management (CRM), and SAP systems) into a single digital platform to streamline cross-departmental workflows, resulting in 6.5+ million USD savings in operating costs
- Co-designed and implemented new business model by introducing external data sources, such as data obtained from e-commerce platforms and Innova Database, to design ready-for-sale products that catered to consumers' preferences and needs. This strategic approach enabled the company to stay ahead of the competition, shorten lead time, and achieve a 20.8% conversion rate increase, generating over 5 million USD in revenue within half a year
- Successfully identified a new trend in the collagen market and proactively assisted the company in responding to the change in time to maintain its leading position in China's collagen drink market as a dietary supplement and skincare products contract manufacturer

## WORK EXPERIENCE

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**Carnegie Mellon University – Heinz College of Information Systems and Public Policy** | Pittsburgh, Pennsylvania

*UPMC Children's Hospital Analytics External Consultant*

*January 2023 – May 2023*

- Identified data partnerships and developed analytics frameworks for proactive mental health crisis prediction, resource allocation, and chronic disease management using non-clinical data, such as social media and wearable device data

**Carnegie Mellon University – Heinz College of Information Systems and Public Policy** | Pittsburgh, Pennsylvania

*Management Science Tutor*

*February 2023 – May 2023*

- Assisted students in comprehending key course concepts, including linear and integer programming, network optimization, sensitivity, goal and non-linear programming, discriminant analysis, and Monte Carlo simulations

**ConnectiveRx** | Pittsburgh, Pennsylvania

*Product Management Intern (Awareness & Adherence Products)*

*May 2022 – August 2022*

- Collaborated with product manager, product director, and senior vice president of products on product enhancement strategy for Prescribers' Digital Reference product
- Facilitated product strategy discussions that included competitive analyses and identification of potential partnerships and market opportunities to expand market share and enter new markets

**TCI Co., Ltd.** | Taipei, Taiwan

*Product Manager / Strategic Development Manager*

*July 2019 – June 2020*

- Initiated and oversaw the launch of an integrated digital platform, which digitized and optimized operational processes, resulting in company-wide cost savings of more than 6.5 million USD within 3 years
- Led the end-to-end development, implementation, and iterations of an app, Integrated Product Development Knowledge Hub, that supported a new business model, reducing lead time by 80% and generating \$5.3 million USD in revenue within 6 months
- Successfully directed the development of a digital marketing tracking system that monitored digital marketing performance and led to a 90% reduction in the average time sales teams spent on lead follow-up
- Co-launched and devised the content of a successful Customer Loyalty Program aimed at increasing the spending of existing clients and lowering the churn rate, resulting in a boost of \$10.5 million USD in new product orders within just 9 months

*Product Manager / Strategic Planning Specialist*

*August 2017 – June 2019*

- Collaborated with IT teams and sales teams to develop and iterate CRM system, and improved the CRM sales-forecasting algorithm, which led to a 40% increase in accuracy of business forecasts within 9 months

- Led the end-to-end development of expo lead tracking app to empower sales teams to follow up on leads in a timely manner, resulting in increased sales conversion rates and the collection of complete datasets for accurate measurement of ROI for each exhibition
- Trained 70+ sales reps to use new digital tools for improved work efficiency
- Created and implemented real-time dashboards to track individual sales performance, activities (calls, emails, visits), win/loss rates, progress of open opportunities, past-due opportunities, sales forecasts, and renewal and upsell ratios

**Ipsos** | Taipei, Taiwan

*Market Research Executive*

*January 2017 – August 2017*

- Designed and conducted 15+ qualitative and quantitative research for 5 Fortune 500 companies across diverse industries (FMCG, automotive, skincare & cosmetics, MLM, and financial), using a range of methods such as in-depth interviews, focus groups, and questionnaires to evaluate brand equity, customer path to purchase (P2P), and pre/post-testing of advertisements

## **EDUCATION**

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**Carnegie Mellon University** | Pittsburgh, Pennsylvania

*MS in Health Care Analytics and Information Technology* (GPA: 3.86/4.0, highest distinction)

*May 2023*

**[Key Projects]**

**Cervical Cancer Diagnosis Using Interpretable Machine Learning Techniques**

*Fall 2022*

*[KNN, Decision Tree, Random Forest, Ensemble Model, Neural Network, SHAP, Skater, Tetrad]*

- Explored the use of machine learning and causal AI for predicting cervical cancer, comparing multiple predictive techniques. Aimed to support the development of a digital screening solution to enhance access to screening for women in areas with limited healthcare resources

**Food Basket Optimization for Nigerian Households**

*Fall 2022*

*[Scikit-learn, Gurobi™ Optimizer]*

- Developed random forest and K-means clustering models to predict food insecurity levels and group similar Nigerian households
- Designed optimized food baskets for different household types to ensure affordability and nutritional adequacy

**Decision Support System Prototype to Prevent Nurse Burnout** *[Python, SQL, Excel]*

*Spring 2022*

- Created a decision support system prototype to predict and prevent nurse burnout by developing a relational database, logistic regression model with 72% accuracy, and user interface for human resource management teams

**National Taiwan University** | Taipei, Taiwan

*MS in Food Science and Technology* (GPA: 4.2/4.3)

*June 2016*

- Thesis: Theasinensin A exerts anti-metastatic effects on HT-29 cells via downregulating the expression of MMP-9 and CCL2

**National Chung Hsing University** | Taichung, Taiwan

*BS in Food Science and Biotechnology* (GPA: 4.09/4.3)

*June 2014*

## **COMPETITIONS**

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**Vertex Pharmaceuticals Healthcare Case Competition - Second Place**

*2021 Fall*

- Developed a comprehensive go-to-market strategy for CTX001, a gene-editing treatment for Sickle Cell Disease, including market analysis, product positioning, pricing strategy, and distribution channels

**MIT Hacking Medicine**

*2022 Spring*

- Developed a digital diary and a prototype stool monitoring gadget for patients with Inflammatory Bowel Disease, enabling them to easily monitor their prognosis and improve disease management
- Collaborated with a team to develop and present product ideas, plans for different phases of product development, and go-to-market strategies to potential investors and stakeholders

## **SKILLS**

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**Product Management:** JIRA, Product Strategy, Risk Management, Agile Development for Mobile Apps

**Data Analytics/Visualization:** Python, SQL, Machine Learning (Scikit-learn, NumPy, Pandas), NLP, Large-Scale Computing (PySpark, Hadoop), Optimization (Gurobi™ Optimizer), Time Series Analysis (Exponential Smoothing, ARIMA, SARIMA), Google Analytics, Tableau, Vega-Lite, Altair, ArcGIS Pro

**UX/UI Design:** CSS, HTML, JavaScript, Balsamiq, Figma