

# JASON TANG (湯忠憲)

Singapore, Singapore

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## SHORT BIO

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Jason currently serves as a Senior Algorithm Engineer (Data Scientist) at Shopee Singapore, focusing on fundamental SPU knowledge-based construction and real-time category recommendation service for seller listing upload. He received his master's degree in Data Science from National Taiwan University and Academia Sinica. He conducts research in both [Natural Language Processing lab](#), NTU and Data Insights Research lab, AS. Under the training of hand on practices, he is equipped with solid knowledge in machine learning and deep learning.

For some of his works, please refer to my github [\[link\]](#) and Kaggle [\[link\]](#).

## EDUCATION

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**National Taiwan University 國立臺灣大學, Taiwan**

*September 2017 - August 2019*

M.Sc. in Data Science

GPA 4.24/4.3

College of Electrical Engineering and Computer Science

Advisor: Dr. Hsin-hsi Chen (陳信希) and Dr. Sheng-wei Chen (陳昇瑋)

**National Tsing Hua University 國立清華大學, Taiwan**

*September 2013 - June 2017*

B.Sc. in Industrial Engineering - operation research

GPA 3.92/4.3, Rank 6

Department of Industrial Engineering and Engineering Management

## EXPERIENCE

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**Shopee Singapore Private Limited, Singapore**

2021-present

*Senior Algorithm Engineer in Marketplace Intelligence - Listing Team*

- Optimize the algorithm for services that include several key functions:
  - Real-time category recommendation during seller listing uploads with 85%+ accuracy across 8 regions/countries.
  - Detection and correction of incorrect categories based on seller feedback, targeting 90%+ accuracy across 8 regions/countries.
  - Identification of new category nodes for global tree optimization and category keyword mining.
- Enhancing a price comparison service using an SPU knowledge base and NLP techniques to accurately match and compare similar products [in-platform](#) and cross-platforms. Our SPU generated data enlarged 55.68x candidates SKU pool for [ID Murah Lebay](#). Reducing 37.33% of campaign lead time, brings 23% gross GMV increase, a significant growth of 96.8% in gross orders, and a 48.27% increase in order contribution. [See our work in Chinese](#)

**Taiwan Semiconductor Manufacturing Company Limited, Taiwan**

2020 - 2021

*R&D engineer in Yield Excellence Department*

- Focus on image processing and advanced metrology algorithm for SEM&EBI image (2nm technology development). Overall models accuracy enhanced 17% for MEOL in-line gating.
- Design (unsupervised) deep learning/rule-based algorithm for auto defect classification and retrieval.

**Academia Sinica, Taiwan**

2017-2018

*Research Assistant at Data Insights Research Lab*

- Research interests: Data Mining, Information Retrieval, and Natural Language Processing using Deep Learning

## PUBLICATION

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**Tsun-Hsien Tang**, Chung-Chi Chen, Hen-Hsen Huang and Hsin-Hsi Chen (2021). “**Retrieving Implicit Information for Stock Movement Prediction.**” In Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval, Online, July 11-15, 2021. [\[slide\]](#)

Yi-Ting Liu, Chung-Chi Chen, **Tsun-Hsien Tang**, Hen-Hsen Huang and Hsin-Hsi Chen (2021). “**Fin-Sense: An Assistant System for Financial Journalists and Investors.**” In Proceedings of the 14th ACM International WSDM Conference, March 8-12, 2021.

**Tsun-Hsien Tang**, Kuan-Ta Chen and Hsin-Hsi Chen (2019). “**Truncated SVD-based Feature Engineering for Short Video Understanding and Recommendation.**” In Proceedings of IEEE International Conference on Multimedia and Expo 2019, Short Video Understanding Challenge, July 8-12, 2019, Shanghai, China.

**Tsun-Hsien Tang**, Min-Huan Fu, Hen-Hsen Huang, Kuan-Ta Chen and Hsin-Hsi Chen (2018). “**Visual Concept Selection with Textual Knowledge for Understanding Activities of Daily Living and Life Moment Retrieval.**” In Working Notes of Conference and Labs of the Evaluation Forum (CLEF 2018), Avignon, France, 10-14 September 2018.

## SELECTED HONORS

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5 <sup>th</sup> TSMC Advanced Metrology&Inspection Award 2 <sup>nd</sup>	2020
TOEIC 960	2020
IEEE ICME Grand Challenge 3 <sup>rd</sup> prize	2019
ACM SIGIR Student Travel Grant	2018
Three Presidential Awards (Top 5%)	2013-2017
Conference of Chinese Institute of Industrial Engineers - Student Paper Contest 1 <sup>st</sup> prize	2017
Hui-Chun Chin and Tsung-Dao Lee Chinese Undergraduate Research Endowment (Top 1%)	2015
Local Guides Level 8	2020
Distinguished and Excellent Teaching Assistants Awards	2019