

# Jiayu SHANG

Department of Electrical Engineering  
City University of Hong Kong  
jyshang2-c@my.cityu.edu.hk  
+(852) 5611-3626

## Education

---

- |                                    |                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 2019.09 - current (Ph. D. student) | City University of Hong Kong<br>Department of Electrical Engineering <ul style="list-style-type: none"><li>GPA: 3.75/4</li></ul>    |
| 2014.09 – 2018.06 (BS)             | Sun Yat-sen University, Guangdong<br>School of Data and computer science <ul style="list-style-type: none"><li>GPA: 3.7/4</li></ul> |

## Publication

---

- Shang, J., Tang, X., Sun, Y. (2023). PhaTYP: predicting the lifestyle for bacteriophages using BERT, *Briefings in Bioinformatics*, Volume 24.
- Jiang, J. Z., Yuan, W. G., Shang, J., Shi, Y. H., Yang, L. L., Liu, M., ... & Yuan, L. H. (2023). Virus classification for viral genomic fragments using PhaGCN2. *Briefings in Bioinformatics*, Volume 24 (co-first author).
- Zhu Y., Shang, J., Peng, C., & Sun, Y. (2022). Phage family classification under Caudoviricetes: A review of current tools using the latest ICTV classification framework. *Frontiers in Microbiology*, Volume 13 (co-first author).
- Cai, D., Shang, J., & Sun, Y. (2022). HaploDMF: viral haplotype reconstruction from long reads via deep matrix factorization. *Bioinformatics*, Volume 38.
- Tang, X., Shang, J., & Sun, Y. (2022). RdRp-based sensitive taxonomic classification of RNA viruses for metagenomic data. *Briefings in Bioinformatics*, Volume 23.
- Shang, J., Tang, X., Guo, R., & Sun, Y. (2022). Accurate identification of bacteriophages from metagenomic data using Transformer. *Briefings in Bioinformatics*, Volume 23.
- Shang, J., & Sun, Y. (2022). CHERRY: a Computational methoD for accuratE pRediction of virus–pRokarYotic interactions using a graph encoder–decoder model. *Briefings in Bioinformatics*, Volume 23.
- Du, N., Shang, J., & Sun, Y. (2021). Improving protein domain classification for third-generation sequencing reads using deep learning. *BMC genomics*, Volume 22 (co-first author).

9. **Shang, J.**, Jiang jinzhe, & Sun, Y. (2021) "Bacteriophage classification for assembled contigs using Graph Convolutional Network." ISMB/ECCB 2021 (Accepted, 18% acceptance rate)
10. **Shang, J.**, & Sun, Y. (2021). Predicting the hosts of prokaryotic viruses using GCN-based semi-supervised learning. BMC biology, Volume 19.
11. **Shang, J.**, & Sun, Y. (2021). CHEER: HierarCHical taxonomic classification for viral mEtagEnomic data via deep leaRning. Methods, Volume 189.
12. Chen, J., **Shang, J.**, Wang, J., & Sun, Y. (2019). A binning tool to reconstruct viral haplotypes from assembled contigs. BMC bioinformatics, Volume 20.
13. Li, S., **Shang, J.**, Duan, Z., & Huang, J. (2018). Fast detection method of quick response code based on run-length coding. IET Image Processing, Volume 12,
14. **Shang, J.**, Li, S., & Huang, J. (2018, April). A robust fuzzy local information c-means clustering algorithm with noise detection. In Ninth international conference on graphic and image processing (ICGIP 2017)

## Awards

---

3. Research Tuition Scholarship (**2020-2023**), City University of Hong Kong.
4. Outstanding Academic Performance Award (**2020-2023**), City University of Hong Kong.
5. Research student symposium 2021 best paper award (**1st Prize**), City University of Hong Kong.
6. The first prize Scholarship (**2016-2017**), Sun Yat-sen University.
7. The third prize Scholarship (**2015-2016**), Sun Yat-sen University.

## Others

---

1. Research Assistant (**09. 2018 - 01. 2019**), Department of Computer Science, The Hong Kong Polytechnic University.
2. Research Assistant (**02. 2019 - 08. 2019**), Department of Information Engineering, The Chinese University of Hong Kong.