

## EDUCATION

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- **The Pennsylvania State University** State College, USA  
*Ph.D in Computer Science and Engineering* Aug. 2019 – May. 2024(*expected*)
- **University of Chinese Academy of Sciences** Beijing, China  
*Master of Engineering in Computer Technology* Sep. 2016 – June. 2019
- **Beihang University** Beijing, China  
*Bachelor of Engineering in Aircraft Airworthiness* Sep. 2012 – June. 2016  
*Bachelor of Science in Applied Mathematics (minor)*

## RESEARCH INTERESTS

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- Bioinformatics and Machine Learning
- Robotics and Control Systems

## PUBLICATIONS

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1. **Qimin Zhang**, Qian Shi, Mingfu Shao. Accurate assembly of multi-end RNA-seq data with Scallop2. *Nature Computational Science*, 2, 148-152, 2022.
2. **Qimin Zhang**, Nathaniel Kremer-Herman, Benjamin Tovar, Douglas Thain. Reduction of workflow resource consumption using a density-based clustering model. *2018 IEEE/ACM Workflows in Support of Large-Scale Science (WORKS)*, pages. 1-9, 2018.
3. Yan Shi, Guoliang Wang, Jinglong Niu, **Qimin Zhang**, Maolin Cai, Baoqing Sun, Dandan Wang, Mei Xue and Xiaohua Douglas Zhang. Classification of sputum sounds using artificial neural network and wavelet transform. *International Journal of Biological Sciences*, 14(8): 938–945, 2018.
4. **Qimin Zhang**, Pei An, Shuquan Wang, Xiaoli Bai, Wei Zhang. Image-based space object reconstruction and relative motion estimation using incremental structure from motion. *2018 IEEE CSAA Guidance, Navigation and Control Conference (CGNCC)*, pp. 1-6, 2018.
5. **Qimin Zhang**, Design of motion control system for frog-inspired bionic hopping robot. *International Conference on Mechatronics and Intelligent Robotics*, pp. 502-509, 2017.
6. **Qimin Zhang**, Zihui Liu, Jieru Zhao, Shuguang Zhang. Modeling and attitude control of Bi-copter. *2016 IEEE International Conference on Aircraft Utility Systems (AUS)*, Pages:172 - 176, 2016.

## WORK EXPERIENCE

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- **Laboratory Corporation of America Holdings (LabCorp)** Remote  
*Data Science Summer Intern* May 2022 - present
  - developing a machine learning model to predict metabolite composition from microbiome data
  - developing a web application for cloud computing resource access control

## RESEARCH EXPERIENCE

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- **Bioinformatics and Computational Biology**
  - design algorithms for bridging over troubled transcripts at single-cell resolution
  - develop an open-source tool Scallop2 for accurate assembly with multi-end RNA-seq data
- **Applied Machine Learning**
  - resource prediction in high-throughput computing
  - 3D reconstruction and healthcare
- **Robotics and Control Systems**
  - modeling and design control systems for bi-copter and frog-inspired robot

## PROFESSIONAL SERVICES

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- **Conference Reviewer** : RECOMB 2022, ISMB 2022, WABI 2021, ISMB/ECCB 2021, RECOMB 2021, ACM-BCB 2020, ISMB 2020, APBC 2020.