

Tang, Zhou

Department of Crop and Soil Sciences, Washington State University

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Education

- 2019 – Present Ph.D. student, Crop Science, Washington State University
- 2013 – 2016 M.S., Animal Genetics, Breeding and Reproduction, HZAU, Wuhan, China
- 2009 – 2013 B.S., Animal Science, HZAU, Wuhan, China

Academic Experience

Graduate Research Assistant (2019 – 2020), Department of Crop and Soil Science, Washington State University, Pullman, WA, USA

- UAV-based biomass estimation in Alfalfa
- UAV-based phenotyping in Wheat
- Satellite imagery segmentation
- Perform Genome-wide Association Study analysis

Non-Academic Experience

Big Data Engineer (2017 – 2018), Hubei Jinpeng Information System Ltd, Wuhan, China

- Responsible for the overall system architecture design and technical architecture selection.
- Responsible for the processing of big data, as well as ETL process optimization.
- Responsible for data modeling, development and testing for data products.

Bioinformatics Engineer (2016 – 2017), Wuhan MetWare Biotechnology Ltd, Wuhan, China

- Responsible for designing and developing metabolomic data analysis workflows.
- Responsible for the design and development of metabolomics data, genomic data and transcriptome data joint analysis process.

Teaching Experience

Graduate Teaching Assistant for Statistical Genomics (2021 spring semester), Department of Crop and Soil Science, Washington State University, Pullman, WA, USA

Academic Advisors

- Dr. Zhiwu Zhang (2019– present)
- Dr. Michael Pumphrey (2019 – present)
- Dr. Sindhuja Sankaran (2019 – present)

Coursework (GPA 3.9)

CPTS 534, Neural Network Design and Applications
BSYSE 530, Machine Vision Biol systems
BSYSE 551, Sensors in Phenomics in Agriculture
BSYSE 552, Unmanned Aerial System in Agriculture
CROP_SCI 545, Statistical Genomics
CROP_SCI 505, Molecular Breeding
SOIL_SCI 568, GIS Spatial Analysis

Programming Skills

R, Python, SQL, JavaScript, Bash and Perl.

Publications and Scholarly Work

Publications

- **Tang, Z.**, Parajuli, A., Chen, C.J. et al. Validation of UAV-based alfalfa biomass predictability using photogrammetry with fully automatic plot segmentation. *Sci Rep* 11, 3336 (2021). <https://doi.org/10.1038/s41598-021-82797-x>
- Chen Hong-bo, **Tang Zhou**, Liu Xiao-hua, Wu Wei-che, Wang Ding-fa, Ling Ming-hu, Hu Xiu-zhong and Cheng Lei, Sep. 2014. Analyzing Effects of Calving Seasons on Dairy Milk Yield with Non-parametric Statistical Method Based on DHI Data. *Hubei Agricultural Science*, Vol. 53, No.17 (in Chinese).
- **Zhou Tang**, Tenglong Zhang, Guiqiong Liu and Xunping Jiang, 2012. Single Nucleotide Polymorphisms of Neurexophilin Gene are Unrelated to Chicken Sperm Storage. *Journal of Animal and Veterinary Advances*, 11: 3463-3468.
- Guiqiong Liu, Xunping Jiang, Chunbo He, **Zhou Tang**. Neurexophilin 1 gene polymorphisms of chicken and its variation among species. *BIOCHEMICAL GENETICS*, 51(7-8):618-25.

Poster Presentation

- *Plant and Animal Genome XXVIII* (Jan 2020), Majority of Biomass Variation Explained by Drone Images One Day Before Harvesting.

Award

- National Encouragement Scholarship, 2012