# FAN BU

fan.bu1@duke.edu
(+1) 919-638-1351

## EDUCATION

**Department of Statistical Science, Duke University** *2017 - present*
Ph.D. in Statistics.

**School of Mathematical Sciences, Peking University** *2013 - 2017*
B.S.(with honor) in Data Science and Big Data Technology.

## RESEARCH INTERESTS

- Machine learning;
- Network analysis;
- Stochastic modelling;
- Sports data analytics.

## PUBLICATIONS AND PREPRINTS

**Fan Bu**, Allison E. Aiello, Jason Xu, and Alexander Volfovsky. Likelihood-based Inference for Partially Observed Epidemics on Dynamic Networks. *preprint (manuscript under review).*

**Fan Bu**, Sonia Xu, Katherine Heller, and Alexander Volfovsky (2019). SMOGS: Social Network Metrics of Game Success. *The 22nd International Conference on Artificial Intelligence and Statistics (AISTATS).*

Wei Zhang, **Fan Bu**, Derek Owen-Oas, Katherine Heller, and Xiaojin Zhu (2018). Who Started It? Identifying Root Sources in Textual Conversation Threads. *arXiv:1809.03648.*

## INVITED TALKS AND PRESENTATIONS

*September 2019.* Invited talk at the 2019 New Englangd Symposium on Statistics in Sports (NESSIS).

*April 2019.* Poster presentation at the 22nd International Conference on Artificial Intelligence and Statistics.

*March 2019.* Spotlight talk at the Duke Machine Learning Day.

*June 2018.* Poster presentation at the 2018 ISBA World Meeting.

*December 2017.* Poster presentation at Women in Machine Learning Workshop 2017.

## SERVICES

*August 2019.* Reviewer for *Science Advances.*

*August 2018.* Instructor of Duke Statistical Science Bootcamp 2018.

## SKILLS

- **Programming Languages**: R, Python, MATLAB and Julia
- **Languages**: Mandarin (native) and English (proficient)

## IN-COURSE AND UNDERGRADUATE RESEARCH

Historical tone change from Middle Chinese to modern Beijing Mandarin: Usage-based phonology and modeling (2019). (Ongoing work with Haowen Zhang and Maria Giavazzi, Ecole Normale Supérieure de Paris.)

The Evolution of Popularity and Images of Characters in Marvel Cinematic Universe Fanfictions (2018). (Technical report at *arXiv:1805.03774*)

Traffic Speed Nowcasting Based on Urban Road Network and Artificial Neural Network (2017). (B.S. thesis)

Detection of Differential Genetic Networks (2016). (Supported by National Undergraduate Innovation Grant of China)