# Xingchi (Anthony) Li anthony.li@stat.tamu.edu in doccstat 🗘 doccstat 🗞 xingchi.li

# **EDUCATION**

Texas A&M University - Department of Statistics

Doctor of Philosophy in Statistics

Committee: Xianyang Zhang, Abhishek Chakrabortty, Lan Zhou, Yong Chen

Georgia Institute of Technology - College of Computing

Master of Science in Computer Science

Texas A&M University - Department of Mathematics

Master of Science in Mathematics

Committee: Peter Howard, Andrea Bonito, Jeffrey Hart

Beihang University - School of Mathematics and System Science

Bachelor of Science: Hua Loo-Keng Mathematics Class (Honored Program of Mathematics)

EXPERIENCE

A/B Testing Experiment Data Processing Pipeline (Lavaflow) Data Cube SQL Test

August 2023

Google LLC, Core Data

Host: Xin Bai, Anthony Lai, (Raymond Ho, Caden Lu)

• Design and implement a new Bazel macro to make the Lavaflow data cube testing results more user-friendly.

- Write C++ code generation binary to dynamically process different data formats using Google SQL.
- Allow users to write ad-hoc test SQL queries to query the data cube golden minion (RecordIO) and check the query results instead of reading large diffs in the minion files.
- Experiment on the relationship between data sampling rates and confidence interval calculations.

#### RulesKeeper: Domain Knowledge Based Rule's Manager

Manager August 2022 Host: Grishma Chole, Korn Potisuntorn, (Chinmaya Sahoo)

Google LLC, Core

- Reliably identify the true failures, triage and resolve them within a time threshold for jobs on Scheduling Platform.
- Set up the programmatic rules based on the domain knowledge and the historical trends to provide intelligent monitoring and reduce notification redundancy by 70% 90%.
- Achieved flexibility for client to choose / control how the service should behave by allowing them to set alerting triggers at more granular level (based on Rolling Time window, Failure densities).
- Achieved increased client reliability by allowing them to view how the alert may look like for a specific set of rules in advance (Adaptive thresholds, Recommendation based on historical data, Seasonality and/or trends checks).

Predictive text embedding through large-scale heterogeneous text networks xinqchi.li/PTEexperiments

• Develop a heterogeneous graph integrating word, document, and label relationships, leveraging both labeled and unlabeled data for improved text embedding.

### Publications

#### Double Blind Conference Paper Submitted

ATSTATS 2025

#### Segmenting Watermarked Texts From Language Models

Xinqchi Li, Guanxun Li, Xianyang Zhang

September 2024 NeurIPS 2024

- Conduct theoretical analysis of Type I, Type II errors for randomization tests to detect the presence of watermarks.
- Propose a method to segment text into watermarked and non-watermarked text with theoretical guarantees.

College Station, Texas, USA Expected May/August 2025

Atlanta, Georgia, USA

August 2020

College Station, Texas, USA

II, Texas, USA

May 2019

Beijing, China

July 2018

# fastcpd: Fast Change Point Detection in R

March 2024

Xingchi Li, Xianyang Zhang

(Submitted) Journal of Statistical Software

- Implement fast change point detection algorithm 500x faster than the vanilla Pruned Exact Linear Time algorithm.
- Provide consistent estimator for the variance estimation with change points.

EVIboost for the Estimation of Extreme Value Index under Heterogeneous Extremes October 2022

Jiaxi Wang, Yanxi Hou, Xingchi Li, Tiandong Wang

Journal of Data Science

- Proposed a gradient boosting algorithm to estimate a functional extreme value index with heterogeneous extremes.
- Data-driven procedure that captures complex and dynamic structures in tail distributions.

Impact of Dietary Supplementation of L-Citrulline to Meat Goats During Gestation September 2024 on Reproductive Performance (Major Revision) Journal of Animal Science and Biotechnology M Newton, A Lopez, C Stenhouse, K Hissen, E Connolly, Xingchi Li, L Zhou, G Wu, W Foxworth, F Bazer

#### CI-Bot: A Hybrid Chatbot Enhanced by Crowdsourcing

November 2017

Xulei Liang, Rong Ding, Mengxiang Lin, Lei Li, Xingchi Li, Song Lu

Web and Big Data

#### Academic Works

| Reviewer for Journal of the American Statistical Association © 0009-0006-2493-0853 |                |            |                                |                 |                      |  |  |
|--|----------------|------------|--------------------------------|-----------------|----------------------|--|--|
| Reviewer for Journal of Machine Learning Research © 0009-0006-2493-0853            |                |            |                                |                 |                      |  |  |
| TA   | Fall 2024      | STAT $610$ | Distribution Theory            | Daren Cline     | Texas A&M Univ       |  |  |
| TA   | Spring 2024    | STAT $654$ | Stat Computing with R & Python | Sharmistha Guha | Texas A&M Univ       |  |  |
| TA   | Fall 2023      | STAT $335$ | Principles of Data Science     | Trevor Harris   | Texas A&M Univ       |  |  |
| TA   | Spring 2023    | ECEN 360   | Computational Data Science     | Kevin Nowka     | Texas A&M Univ       |  |  |
| TA   | Fall 2022      | STAT $335$ | Principles of Data Science     | Trevor Harris   | Texas A&M Univ       |  |  |
| RA   | Spring 2022    |            |                                | Xianyang Zhang  | Texas A&M Univ       |  |  |
| RA   | Fall 2021      |            |                                | Xianyang Zhang  | Texas A&M Univ       |  |  |
| RA   | $Summer\ 2021$ |            |                                | Jianhua Huang   | Texas A&M Univ       |  |  |
| TA   | $Summer\ 2021$ | STAT $651$ | Statistics in Research I       | Alan Dabney     | Texas A&M Univ       |  |  |
| TA   | Spring 2021    | STAT $421$ | Machine Learning               | Shahina Rahman  | Texas A&M Univ       |  |  |
| TA   | Fall 2020      | STAT $604$ | Statistical Computations       | Faron Kincheloe | Texas A&M Univ       |  |  |
| TA   | Spring 2020    | CS 7641    | Machine Learning               | Charles Isbell  | Georgia Inst of Tech |  |  |

# TECHNICAL SKILLS

| ${f R}$  | 30k + LOC | fastcpd available on CRAN, abseil available on CRAN |  |  |  |
|--|-----------|---|--|--|--|
| Python   | 20k + LOC | PyTorch   |  |  |  |
| C++  | 10k + LOC | FlumeC++  |  |  |  |
| Java   | 10k + LOC | Promise Graph, Spanner GoRM, gRPC                   |  |  |  |
| ${f Java Script}$  | 3k + LOC  | D3  |  |  |  |
| $\mathbf{Bazel}$   | 1k+LOC    |   |  |  |  |
| Protocol Buffers, SQL, MATLAB, Hadoop, Spark, Apache Pig, Hive |           |   |  |  |  |