# HANBIN LIU

Homepage: https://hanbin-liu.github.io \leq Email: liuhanbin1023@gmail.com \leq Phone:15273687835

### **EDUCATION**

Southern University of Science and Technology(SUSTech), Shenzhen Sep 2019-Present Junior Undergraduate Major in Statistics, Department of Statistics and Data Science

- GPA: 3.87/4.00 Ranking: 2/41(top5%)
- · Core courses: Probability Theory(100), Mathematical Statistics(100)

### **SKILLS**

R, Python, MATLAB, Java, LaTeX

#### RESEARCH EXPERIENCE

### Prof. Jicong Fan's Group(Computer Vision)

Research Intern, School of Data Science, CUHK-Shenzhen

Jul 2021- Sep 2021 Shenzhen, China

- · Deriving the kernel version of Selective Sampling-based Scalable Sparse Subspace Clustering for nonlinear cases.
- · Solving LASSO problems in our research by using the cyclic coordinate descent method.

# Prof. Alice Cheng's Group(Content Analysis)

Jul 2021-Aug 2021

Research Intern(Remote), Department of Communication, NC State University

NC, U.S.A

- · Using content analysis to research COVID-19 hot issues and agenda building in China.
- · Examing the reliability by calculating coefficients like Scott's Pi, Cohen's Kappa, and Krippendorff's alpha.

# PROJECT& SEMINAR

### Data Mining Applications in DC Crime(Supervisor: Prof. Zhang)

Spring 2021

- · Data statistics and data visualization, including data preprocessing, visualization, correlation analysis and analysis of crimes over geography and time.
- · Classification & Clustering: classify(cluster) the geography by the crime events.
- · Predicting the number of crimes in the future and using PCA to reduce dimensionality.

### Self-contained Report on Discrete Math(Supervisor: Prof. Qi Wang)

Fall 2020

- · Stating the methods of solving linear recurrence relations in the language of linear algebra.
- · Report: https://hanbin-liu.github.io/linear-recurrence-report/

#### AWARDS & HONORS

· The 12th Chinese Mathematics Competitions (Provincial First Prize)

Dec 2020

· China National Encouragement Scholarship

Nov 2020, 2021

### **OTHERS**

· GitHub: https://github.com/Hanbin-Liu