Kuixu Xiang

+86 17773162149 | quincyxiang.github.io | 12310421@mail.sustech.edu.cn

EDUCATION

Southern University of Science and Technology (SUSTech), Department of Mathematics

Bachelor of Science in Mathematics and Applied Mathematics   Expected Graduation Date: 2027

- Cumulative GPA: 3.59/4.00 | Weight Average Score: 86.82/100
- English Fluency: TOEFL iBT 109 (Feb.2025)
- Core course: *Advanced Linear Algebra (90) | Probability Theory (87) | Introduction to Matlab Programming (94) | Mathematical Analysis III (87)*

EXPERIENCE

3rd Prize of Chinese Mathematic Competition(CMC)   Provincial Level   11\2024

PBL Interdisciplinary Online Course   1-2\2025

TOPIC: *Natural Language Processing and Public Opinion Monitoring*

Instructed by CCIPE (China Center for International People-to-People Exchange Ministry of Education)

- My project aims to identify the advantages of specific products based on customer reviews and ratings from online platforms such as Amazon.
- Leveraging dependency parsing and sentiment analysis techniques like VADER to extract key advantage-related information from preprocessed text.
- Applying Non-negative Matrix Factorization (NMF) to classify and group the extracted advantage pairs into distinct topics, providing a structured analysis of product strengths.

FIELDS OF INTEREST

Mathematical applications in Interdisciplinary fields :

- Having a strong interest in the applications of mathematics within Artificial Intelligence and Machine Learning, particularly in the field of *Natural Language Processing (NLP)*.
- Especially interested in exploring methods for processing and interpreting ***homophonic phenomena in the Chinese language,*** a challenge that frequently arises in online reviews on Chinese social media. This phenomenon is especially relevant for detecting and mitigating harmful or obscene content, making it a crucial aspect of sentiment analysis and content moderation.

TECHNICAL SKILLS

- **Programming & Tools** MATLAB | Python (including libraries relevant to NLP (e.g., NLTK, spaCy, Scikit-learn)) | LaTeX
- **Mathematics & Statistics** (*Mathematical analysis, Algebra, Probability Theory, Number theory*)
  Familiar with concepts from textbooks including *An Introduction to the Theory of Numbers 5th(Niven) | GTM 73 Abstract Algebra(Hungerford) | Complex Analysis(ELias M, Stein, Rami Shakarchi), etc.*
- **Languages** (*Proficient in Chinese, Intermediate in English, Beginner in French*)
  TOEFL iBT Total score: 109 (Reading 28 | Listening 30 | Speaking 23 | Writing 28)

Shenzhen, GuangDong, China,
No.1088 Xueyuan Blvd, Nanshan District, Shenzhen, Guangdong Province, P.R. China 518055