# Chen, Mingyang

Changping District, BJ | 102249 | cmy0211@yeah.net Nov.26.2024 update

#### **EDUCATION**

**China University of Political Science and Law** (CUPL)

09/2021 - 07/2025

- **Degree:** Bachelor of Law (*LL.B. in Law*)
- **GPA:** 90.06/100 (rank Top 5%) → 3.84/4.00 (WES iGPA Calculator)
- Core and Related Courses:
  - **Criminology & Sociology:** Criminology (*A*), Introduction to Sociology (*A*), Sociology on Aberrant Conduct (*A*), Contemporary Chinese Society (*A*)
  - **Criminal Law & Criminal Justice:** General Principles of Criminal Law (*A*), Advanced Criminal Law (*A*), Criminal Procedure Law (*A*), Science of Law of Criminal Execution (*A*), Delinquency of Juvenile and Young Adults and Juvenile Justice (*A*), Law and Economics (*A*)
  - **Data Analysis:** Computer Concepts (*A*), Introduction of Logics (*A*), Discrete Mathematics (*A*), The Basis of Program Design Dev C++ (*A*), Python Programming Language (*A*), Social Statistics R Programming Language (*audit*)

## **RESEARCH INTERESTS**

**Sentencing:** I focus on how to correct biased sentencing. I am also interested in machine learning's potential for biased sentencing correction.

**Criminal Policy Evaluation:** I am interested in using causal inference to evaluate criminal policies. I also focus on causal inference with machine learning.

**Juvenile Justice:** I am interested in why teenagers commit crimes and the correction institution.

# **WRITINGS**

**Mingyang Chen** (2023). Does China Achieve the Goal of Treating Like Cases Alike? Evidence from the Judicial Documents of China. *Unpublished Working Paper*.

**Mingyang Chen**, Yantong Guo, Dai Li, Boyang Xu (*forthcoming*). Treating Different Delinquent Teens Differently: An Empirical Study on China's Zhuanmen Schools. *Youth Justice*. (*Awaiting Referee Assignment*).

**Mingyang Chen**, Boyang Xu (*expected to complete in 2025*). Punishment Leads to Punishment? A Quasi-Experimental Analysis. (*work in progress*)

**Mingyang Chen**, Gaojie Song, Zhipeng Wu, Zhanxue Xu, Boyang Xu (*expected to complete in 2026*). Criminal Justice Theory, Empirical Study, Machine Learning and Judge Decision-Making. (*work in progress*)

# RESEARCH EXPERIENCES

• Project Leader: Dr. Boyang Xu

• Advisor: Dr. Boyang Xu

- **Description:** Previous research on punishment deterrence theory largely focused on the impact of increased punishment on crime rates but seldom looked at the effects of reduced penalties. Moreover, previous studies have also paid great attention to the differential effects of deterrence on different types of crimes. Based on the theories of Lord Shang and Beccaria, we will use China's Plea Bargain pilot system and employ the DID method to discuss the impact of reduced penalties on crime rates and the varying effects of deterrence on different crimes. This study will deepen the understanding of deterrence effects and address the heterogeneity analysis concerns raised by previous scholars.
- **My Work:** research design; data collection on crime rate and judicial documents; data analysis; literature review on theory frame and Plea Bargain pilot system.
- **Final Work (expected):** a paper titled "Punishment Leads to Punishment? A Quasi-Experimental Analysis" (*first author*).
- Other Information: this work is expected to end at 09/2025.

#### **Project Leader**, Independent Research

03/2024 - Present

- **Sponsor:** CUPL Data Law Lab's Fund for Law Experiment Model (*Grant:* ¥10000)
- Advisor: Dr. Boyang Xu & Dr. Dai Li
- **Description:** Previous sentencing prediction models often overlooked the quality of the datasets used for training. We aimed to use treating like cases alike (*TLCA*) theory and NLP to filter China's judicial documents datasets. By comparing the training results of models before and after filtering, we attempted to discover the potential of criminal justice theory to improve the machine learning model's performance. Our findings indicate that filtering datasets with criminal justice theory can effectively enhance data quality and, consequently, the performance of the trained models. This research plays a significant role in revealing the potential application of social science theories in machine learning.
- **My Work:** research design; data collection on judicial documents; literature review on TLCA theory; build a stacking model; build rules for feature extraction; draft the manuscript.
- **Final Work:** a report titled "Empirical Research on Treating Like Cases Alike Can Improve the Performance of Prison Term Prediction Models: A Study Combining Data-Driven and Theory-Driven Approaches" (*first author*). If interested, visit our models' beta version website <a href="http://118.25.58.138">http://118.25.58.138</a> (*need translation*).
- **Other Information**: We attended a model competition and got the first prize. (*rank 4/240, the only undergraduate-led team getting the first prize*).

Research Assistant, Annual Project of China Youth & Children Research Association 03/2024 - 08/2024

• **Project Leader:** Dr. Xuelian Zhao

• Advosor: Dr. Dai Li & Dr. Boyang Xu

• **Description:** Discussions on the grading and categorization (GC) system in China's Zhuanmen Schools have been lacking empirical evidence. Social control theory is often used to assess correctional difficulty and determine correction strategies. We utilized data from 3 Zhuanmen Schools in China, employing one-way ANOVA and LSD tests to explore which GC method is more reasonable. We also investigated the pathways among social control theory factors and the relationship between these factors and the severity of behavior using mediation analysis. Our study contributes by offering

empirical evidence-based suggestions for the GC system and explores how social control affects the severity of behavior.

- **My Work:** research design; literature review on PPCP theory and GC system; questionnaire design; conduct surveys in 2 provinces; data analysis; draft the manuscript.
- **Final Work**: a paper titled "Treating Different Delinquent Teens Differently: An Empirical Study on China's Zhuanmen Schools" (*first author*). I attended an academic forum.

#### Independent Researcher, Independent Research

09/2023 - 03/2024

- **Description:** Treating like cases alike is always a pursuit in legal professionals. Prior research has proved the biased relationship between reason writing and sentences. But what legal professionals want to know as well is the relationship between facts, description, and reason writing. Besides, prior research does not prove treating like cases alike from a systematic view. So, I collected 532 robbery judicial documents and developed a method to test the relationship between them using RWMD. This study fills the gap in previous research regarding the principle of treating like cases alike.
- **Final Work:** an unpublished paper titled "Does China Achieve the Goal of Treating Like Cases Alike? Evidence from the Judicial Documents of China". Another independent research is based on it.

**Project Leader**, National Undergraduate Research Training Project

09/2022 - 09/2023

- **Sponsor:** Ministry of Finance's Fund for National Undergraduate Training Program (*Grant:* ¥10000)
- Advisor: Dr. Ai Ma
- **Description:** Prior research has examined the plight of Tongqi (*gay's wife*) in a static context, neglecting the dynamic process of their deception. This study put Tongqi in a victim placement, aiming to build a theoretical framework that captures the evolution from marriage deception to truth discovery. Using interviews and questionnaire surveys on 31 Tongqi, we've developed a three-stage model that explains the deception and the difficulty of leaving their gay husband. We also challenged the previous belief that the internet is unequivocally beneficial for Tongqi.
- My Work: research design; literature review on Tongqi; interview 22 Tongqi; draft the manuscript.
- **Final Work:** submit a report titled "How They Know and Escape from the Truth? Research on Tongqi's Cheating Marriage" (*first author*) to the evaluation committee and get a 95/100 score. (*rank 1/101*).

# PRESENTATIONS / FORUMS

Guanghua Law School, Zhejiang University, et al.: **Towards Data Law Conference**, Hangzhou

11/2024

- Title: "Criminal Justice Theory, Empirical Study, Machine Learning and Judge Decision-Making"
- This is a peer-review academic conference held by Zhejiang University, Zhejiang City University and Zhejiang Institute for Legislation and the Rule of Law.
- I will attend it as presentor in 11.30, 2024. This conference would be over in 12.1.
- If interested, visit <a href="https://mp.weixin.qq.com/s/8XYbyABbDvJIIw-j-1jp5Q">https://mp.weixin.qq.com/s/8XYbyABbDvJIIw-j-1jp5Q</a> (need translation).

School of Criminal Justice, CUPL: **JIMEN Criminal Integration Forum**, Online

08/2024

- Title: "Verification of the Grading and Classification System of Zhuanmen Schools".
- This is a peer-review academic online forum hosted by Dr. Zhiyuan Wang.

• If interested, visit Wechat Official Account "jmythxsfjt" (need translation).

#### Hotarubi: Anti-domestic Violence Roundtable Discussions, Beijing

11/2022

- Title: "Mixed-Orientation Marriage and Domestic Violence Tongqi (gay's wife) Suffered".
- This is not a peer-review workshop; "Hotarubi" is an NGO for anti-domestic violence.
- If interested, visit <a href="https://mp.weixin.qq.com/s/a6-1JkS2O1oWdgeuvnpn-w">https://mp.weixin.qq.com/s/a6-1JkS2O1oWdgeuvnpn-w</a> (need translation).

## **INTERNSHIP / VOLUNTARY**

Legal Knowledge Engineer, Famao Technology Co., Ltd

06/2024 - 08/2024

- Develop an automatic data search engine for legal professionals with computer scientists.
- Develop a tool for building social networks automatically with computer scientists.
- Develop a "Chinese judicial documents feature extraction" rule for computer scientists.

#### Criminal Lawyer Intern, ZHONGYIN Law Firm

07/2023 - 08/2023

- Draft legal documents for defendants.
- Collect materials, including related legal provisions and judicial documents.

<b>Teaching Volunteer</b> , Western Volunteers Association
<b>Teaching Volunteer</b> , Volunteer Department of CUPL Student Committee

02/2023

01/2022

## **SERVICES**

**Undegraduate Teaching Assistant**, Dr. Boyang Xu, School of Criminal Justice, CUPL

03/2024 - Present

- Grade assignments.
- Assist in reviewing machine learning-related criminal justice journal manuscripts.

Student Committee Minister, School of International Law, CUPL

07/2022 - 07/2023

# **REWARDS AND GRANTS**

First Prize Winner, Second Data Law Experiment Model Competition	09/2024
Grant: ¥10000, CUPL Data Law Lab's Fund for Law Experiment Model	09/2024
Second Prize Scholarship, CUPL	12/2023
First Prize Scholarship, CUPL	12/2022
Grant: ¥10000, Ministry of Finance's Fund for National Undergraduate Training Program	09/2022

# **SKILLS**

**Language:** Mandrain Chinese (mother tongue), Taiwanese (mother tongue), English (fluent, IELTS 7.5)

Computing: R, Python, SPSS

- R: Text Mining, Social Network, K-Means, PSM, DID, Mediation Analysis, SEM, Data Visualization, ...
- Python: Lasso, Ridge, MLP, SVR, XGBoost, Stacking, Decision Tree, kimi API (L.L.M.), ...

Typesetting: MS Office, Markdown