

# WENHUI LYU

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## EDUCATION

### Peking University

Bachelor of Laws in PPE (Philosophy, Politics, and Economics)

Beijing, China

Sep. 2018 – Jul. 2022

- Overall Score: 92/100; Rank 2/37; Overall GPA: 3.84/4.0
  - Selected courses: Introduction to Computing (94/100, taught Python); Advanced Mathematics (95/100, taught calculus); Applied Statistics (96.5/100, taught SPSS); Computational Practices for Social Science Research (95/100), Web Developer Bootcamp (on *Udemy*, in progress)
- Awards: National Scholarship (top 0.2% in China), Merit Student Pacesetter (1/295 in Yuanpei College at PKU), Outstanding Project of Undergraduate Research (top 2 in Dept. of Philosophy)

## PROJECT EXPERIENCE

### Terminology Network in Kant's Critique of Pure Reason

Sep. 2021 – Oct. 2021

- Generated a network of terminology to help students in a philosophy course understand Kantian philosophy
- Collected 10k+ lines of data from [projekt-gutenberg.org](https://projekt-gutenberg.org) and [de.wiktionary.org](https://de.wiktionary.org) using requests and BeautifulSoup
- Extracted important terms with traditional NLP methods, such as parsing and statistical techniques like C-values
- Trained a BERT model on texts of 860k+ words on a remote Linux Server with GPU; increased the prediction accuracy of the pretrained model by more than 70%

### Visualization of Kant's Terminology Network

Nov. 2021 – Dec. 2021

- Generated a network of terms according to the semantic vectors in my BERT model using NumPy
- Built a website with animated interactions using AntUI, Animate.js, and Canvas to help my students utilize the terminology network
- Initialized and managed user service with Vue CLI, WebPack, Babel, and yarn; introduced Less, TypeScript and Axios to help with development
- Deployed this mindmap visualization project to Google Compute Engine (GCE) using Nginx

### A Philosophy Student's CS Homework

Sep. 2021 – Jan. 2022

- Successfully completed the course Computational Practices for Social Science Research and its 10 computational practices, invited by Professor Xiaoming Li to share my personal experiences
- Compiled a 90-page pamphlet of 1k+ lines of codes and illustrations at length, which will be used for pedagogical reform of social sciences and humanities at PKU and in China

### kindle2anki (light)

Feb. 2021 – Mar. 2021

- Coded 1k+ lines in Python and developed a PyQt-based add-on for learning app *Anki*, which can generate vocabulary cards in multiple languages from reading notes on a *Kindle*
- Decoded .db files on *Kindles* into tuples with SQLite and tqdm; enabled the processing of high data flux of 10k+ lines

## WORK EXPERIENCE

### Pineapple Planet Studio

Software Engineer (Part-Time)

Beijing, China

Nov. 2021 – Present

### Planet Lamplighter

- Helped develop a game designed for travel enthusiasts and those interested in direction identification
- Collected 5k+ lines of geographical data on latitude and longitude from Wikipedia using request and selenium
- Composed automated API requests to fetch, record, score, and compare text translation and interpretation
- Participated in the front-end design of the *Wechat MiniProgram* version
- Testing and making improvement to the *Wechat MiniProgram* version

## LEADERSHIP, COMMUNITY ACTIVITIES, AND TEACHING EXPERIENCE

### Department of Philosophy, Peking University

TA to Professor Zengding Wu for Plato's Republic

Beijing, China

Mar. 2019 – Jun. 2019

- Served as the first sophomore TA in the history of the Philosophy Department, due to the professor's recognition of my academic performance
- Guided weekly discussion sessions, addressed course-related issues, answered questions, and graded homework
- 15 students I supervised outperformed the other 90 students who were supervised by PhD, MA, or senior undergraduate TAs for their final essays

**Department of Philosophy, Peking University**

TA to Professor Xing Nan for The History of Western Philosophy: Part II

Beijing, China

Sep. 2021 – Present

- Guide bi-weekly discussion sessions, address course-related issues, answer questions, and grade essays
- Received excellent feedback from my students and the professor

**Peking University et al.**

Beijing, China

Student Representative Speaker

Jul. 2019, Oct. 2019, and Oct. 2020

- Invited twice by PKU's Center for Excellent Teaching and Learning to give a lecture on "Get to Know PKU Students" to new PKU professors, so as to help them adjust their teaching and advising accordingly (media coverage available online: [2019](#), [2020](#))
- Invited by the National General Education Broadcast to share how general education was conducted in PKU ([media coverage available online](#))

**PKU Humanities2Tech**

Beijing, China

Founder and Organizer

Nov. 2021 – Present

- Founded an extracurricular group of PKU students interested in transitioning to tech, mostly from humanities or social science backgrounds
- Organized the sharing of information and personal experiences to challenge traditional stereotypes of women as incompetent for jobs in the technology industry

**TECHNICAL SKILLS**

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**Programming languages:** Python, TypeScript/JavaScript, HTML, CSS**Frameworks & tools:**

- Natural Language Processing (NLP) and Deep Learning: Bidirectional Encoder Representations from Transformers (BERT), remote Linux server with GPU, PyTorch, NumPy, spaCy
- Data Mining: requests, BeautifulSoup, selenium, matplotlib, regular expression, tqdm, SQLite, SPSS, pyvis
- Software Development: PyQt, Vue CLI, AntUI, Animate.js, Canvas, WebPack, Babel, yarn, Less, Axios, GitHub pages, Nginx, Google Compute Engine (GCE)

**ADDITIONAL INFORMATION**

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**Interdisciplinary Background:** Studied college-level biology intensively for two years during high school, admitted to the Department of Biology at PKU on the basis of my performance in the National Biology Olympiad (NBO), then switched to PPE after one year and studied philosophy in depth

**Research Experience in Humanities:** Completed a first-class research project on Kant's theoretical philosophy, which was awarded the Principal's Fund for Undergraduate Research and the New Humanities Scholarship, and was selected as the Outstanding Project of Undergraduate Research (top 2 in Dept. of Philosophy)

**Languages:** Mandarin Chinese (native), English (proficient), German (fluent, CEFR B2 Goethe-Zertifikat)

**Test Scores:** TOEFL 111 (L29 R30 S25 W27); GRE V163, Q168, AW4.5