

# Zhiqiu Xia

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## EDUCATION

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### Rutgers, The State University of New Jersey

*PhD in Electrical and Computer Engineering*

- Advisor: Hang Liu

New Brunswick, NJ, US

*Sept. 2024 - Present*

### The Hong Kong University of Science and Technology (HKUST)

*BSc in Data Science and Technology*

- CGA: 3.706/4.3, Major CGA: 3.882/4.3

Hong Kong, China

*Sept. 2020 - May. 2024*

### University of California, Davis

*One-quarter exchange program*

- Coursework: Database Systems (A+), Introduction to Artificial Intelligence (A+)

Davis, CA, US

*Jan. 2023 - Mar. 2023*

## RESEARCH EXPERIENCES

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### RST-Centric Related Work Generation with LLM

*PhD Project*

- Proposed a novel related work generation approach centered on Rhetorical Structure Theory (RST), which leverages LLMs to generate well-structured related work.

New Brunswick, NJ, US

*Feb. 2025 - Present*

### A Survey of Uncertainty Estimation on Large Language Models

*PhD Project [Paper]*

- Introduced a new taxonomy for uncertainty estimation methods on large language models (LLMs) from the perspective of LLMs and conducted a thorough evaluation of representative uncertainty estimation approaches across various datasets and domains.

New Brunswick, NJ, US

*Sept. 2024 - Feb. 2025*

### Elevator, Escalator, or Neither? Pedestrian State Detection Based on Inertial Navigation System

*HKUST Final Year Thesis [Paper]*

- Proposed a model architecture specific for elevator/escalator detection based on inertial measurement unit (IMU) data by leveraging the characteristics of taking elevators/escalators and embedding them into the model.

Hong Kong, China

*Aug. 2023 - Apr. 2024*

### Target-agnostic Source-free Domain Adaptation for Regression Tasks

*HKUST UROP program [Paper]*

- Proposed TASFAR, a novel target-agnostic source-free domain adaptation approach for regression tasks. In contrast to prior arts, TASFAR improves the source model's performance on the target domain without access to source domain and knowledge of domain gap.

Hong Kong, China

*Oct. 2022 - Aug. 2023*

## AWARDS

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### Chern Class Scholarship

*Offer by HKUST*

- Offered to students talented in Mathematics.

*Sept. 2021 - May. 2024*

### Dean's List

*Offer by HKUST*

- Offered to students whose TGAs are at least 3.7 calculated from at least 12 credits registered.

*Jun. 2021 - May. 2024*

### University's Scholarship Scheme for Continuing Undergraduate Students

*Offer by HKUST*

- Offered to students whose CGAs as of Summer Term of the previous academic year in the top 10th percentile of all continuing UG students.

*Jun. 2021 - May. 2024*

## SKILLS

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**Languages:** English (Fluent), Mandarin (Native).

**Coding:** Python, C++, R, Typescript, Numpy, Pytorch, Matplotlib, Huggingface, Slurm