David(Jiahao) Fu

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EDUCATION	**University of Illinois at Urbana-Champaign**	Expected Graduation Date: May 2025
	Bachelor of Science in Computer Science	GPA: 4.00/4.00

- Related coursework: calculus, data structure, algorithms, computer architecture, machine learning, computer vision, database system, reinforcement learning, natural language processing
- Dean's List, Fall 2021, Spring 2022, Fall 2022, Spring 2023
- James Scholar, Grainger College of Engineering

SKILLS		
	C++, Java, Python, Git, PyTorch, LaTex	Advanced
	C, HTML, CSS, Linux, JavaScript, SQL, React, TensorFlow	Intermediate
	Adobe Photoshop, MATLAB, AWS	Basic

EXPERIENCES	**IBM-Illinois Discovery Accelerator Institute**	Urbana, IL
	Undergraduate Intern	*Sep 2024 - Present*

- Mentored by Prof. Yuxiong Wang and Prof. Vikram Adve and work with PhD and master students to create a state-of-the-art model for domain specific language generation by leveraging techniques like program synthesis, program verification, and model merging

UIUC Forward Data Lab Urbana, IL
Researcher *Sep 2023 - Present*

- Mentored by Prof. Kevin Chang and work on exploring new approaches that use memory mechanism to address the challenge of extending context window length for LLMs
- Combined RAG and memory cache to outperform both RAG and memory-based methods

PeopleWeave Project Urbana, IL
Data Recommendation Team Member *Apr 2023 – Dec 2023*

- Mentored by Prof. Matthew Caesar and work in group to discuss and implement a new recommendation algorithm with knowledge graph algorithms and Attention mechanism for users

China Merchants Bank Nanjing, China
Software Development Intern *Jun 2023 – Jul 2023*

- Completed several Java projects individually by using frameworks including SpringBoot, Kafka, and MyBatis, and created unit tests for the projects
- Collaborated with mentor to improve the efficiency of the code and eventually publish the projects on production environment

CMU RoboTutor Team Remote
Data Analytics Intern *Aug 2020 – Mar 2021*

- Analyzed data collected by mobile app developed by the team during experiment with the mentorship of the project leader, Prof. Mostow, and collaboration with a senior student
- Predicted future usage of the app by utilizing machine learning model and identified potential problems of the app and provided solutions to these problems to improve the project

ACTIVITIES	**UIUC International Collegiate Programming Contest Team**	Urbana, IL
	Team Member	*Jan 2022 - Present*

- Honors in the 48th Annual ICPC World Finals held in Astana, Kazakhstan
- Champion of ICPC Mid-Central Programming Contest 2022 held in February 2023