Shanyong Wang

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Piscataway, NJ, US

Introduction

I am currently an exchange student studying computer science at University of Illinois at Urbana-Champaign from ShanghaiTech University. I am also a junior student studying at ShanghaiTech University, major in Computer Science.

Education

- **University of Illinois Urbana-Champaign** *Aug. 2024 - May. 2025*
  Exchange Student at The Grainger College of Engineering Urbana, IL, US

- **ShanghaiTech University** *Sept. 2022 - Jun. 2026(excepted)*
  Bachelor of Engineering in Computer Science Shanghai, China

Experience

- **Rutgers University, The WISE LAB [🌐]** *Jun. 2025 - Present*
  Research intern, advised by Prof. Yongfeng Zhang Piscataway, NJ, US
- **University of Illinois Urbana-Champagin, BLENDER Lab [🌐]** *Aug. 2024 - May. 2025*
  Undergraduate Research Assistant, advised by Prof. Heng Ji and mentor Xiusi Chen Urbana, IL, US
  - Investigated the use of large language models (LLMs) in decision-making contexts across diverse application domains.
  - Designed a generalizable framework that enables LLMs to perform reasoning-based decision making.
  - Validated the framework on multiple tasks, including medical diagnostics, agriculture planning, and financial forecasting, demonstrating its adaptability and cross-domain effectiveness.
  - Conducted systematic evaluations of model performance, decision consistency, and alignment with human preferences.

- **ShanghaiTech University, WiseLab[🌐]** *Jun. 2024 - Present*
  Undergraduate Research Assistant, advised by Prof. Ze Xiong Shanghai, China
  - Designed elector-tactile feedback device and elector-tactile circuit.
  - Ensured the interface remained lightweight and efficient while offering seamless human-machine interaction.
  - Designed, modeled, and coded various virtual environments within Unity to enhance the interactive experience using C#.
  - Implemented multi-model sensing and feedback platform using for meta-verse.

Patents and Publications

C=Conference, J=Journal, P=Patent, S=In Submission, T=Thesis

(*: Equal contribution)

[S.1] **DecisionFlow: Advancing Large Language Model as Principled Decision Maker**.
Xiusi Chen*, **Shanyong Wang***, Cheng Qian*, Hongru Wang*, Peixuan Han, Heng Ji. Manuscript submitted for publication in *EMNLP2025*. [Code] [Paper] [Website]

Projects

- **Sokoban Game Development on Longan Nano** *May. 2023 – Jun. 2023*
  Tools: C#, RISC-V [🐙]
  - Developed a Sokoban-style pixel-based game using Minecraft-inspired textures on the Longan Nano development board, leveraging RISC-V architecture and C programming.
  - Engineered custom software-hardware interfaces to control game mechanics via integrated and external board buttons, ensuring seamless interaction and responsiveness.
  - Optimized game performance by managing memory usage efficiently to accommodate the limited resources of the embedded system.
  - Incorporated real-time player feedback through visual and auditory cues, enhancing the gaming experience.

Skills

- **Programming Languages:** Python, C, C#, C++, R, Matlab, RISC-V
- **Modeling** Unity, Blender, Arduino
- **Tools:** CUDA, TensorFlow, PyTorch, Git, LaTeX, Markdown