

Jianwei Ni

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EDUCATION

University of Illinois Urbana-Champaign | IL, US

Aug. 2023-Present

Bachelor of Science in Statistics & Computer Science (In Progress)

Institution GPA: 4.00/4.00

Honors: Deans List of 2023 Fall and 2024 Spring

Core Courses: Data Science in Python, Discrete Structure, Computer Science in Java, Computer Science in C++, Statistics and Probability, Intro to Information Science, Calculus III, Data Structures, Computer System, Linear Algebra, Statistics Modeling

PROFESSIONAL EXPERIENCES

Carle Illinois College of Medicine | XR Developer | Champaign, IL

Aug. 2024-Present

- Designed and developed the *Lumbar Puncture Tutorial*, a Vision Pro mixed reality application that guides medical students in mastering lumbar puncture techniques with human-instructor-like precision
- Engineered an LLM-powered AI assistant for the *Lumbar Puncture Tutorial*, leveraging AWS as the backend server to deliver intelligent, multimodal procedural support
- Created object-based 3D animations and an intuitive virtual user interface, enhancing spatial interaction and learning in a mixed reality environment

Atlas Copco Group | Data Analyst Intern | Shanghai, China

Jun. 2024-Aug. 2024

- Developed a Python program that analyzes over 10,000 bidding announcements, efficiently filtering them down to approximately 100 with high potential for commercial opportunities, providing actionable insights to support the team in identifying valuable business leads
- Contributed to the upgrade of the company's OA system, aimed at improving cross-functional team efficiency, streamlining internal project management, and ensuring smooth deal workflows with dealers
- Conducted in-depth research on the loading and unloading times of sold air compressors using Smartlink, assisting the sales team in optimizing the customer proposal model and refining their product recommendation algorithm, ultimately increasing existing customer retention and repurchase rates

WVGL | Product Intern | Wuxi, China

Oct. 2021-Dec. 2022

- Contributed actively to a blue-green algae detection project that has been adopted successfully at the Taihu Nanquan Water Plant in Wuxi, utilizing Unreal Engine 4 to simulate the plant's operational environment
- Developed a user-friendly interface and implemented real-time navigation visualizations, incorporating advanced animation techniques to simulate the removal of blue-green algae
- Collaborated seamlessly with the project team throughout the development process, ensuring the technical requirements were met while optimizing system performance

RESEARCHES AND PROJECTS

University of Illinois Urbana-Champaign | Course Assistant of CS124 | Champaign, IL

Jan. 2024-Present

- Held weekly online office hours, offering students support and personalized guidance on homework and machine problems
- Encouraged collaborative learning by fostering student engagement and discussion during office hours
- Used teaching aids to enhance explanations and ensure thorough understanding of course material
- Promoted an inclusive and supportive learning environment, encouraging open communication and active participation

University of Illinois Urbana-Champaign | Research Assistant | Champaign, IL

Nov. 2023-Jan. 2024

- Contributed as an author to the paper titled "Is My Dog Too Polite To Me?": Innovating Virtual Companionship Through Large Language Model-Powered Mixed Reality Virtual Pets
- Successfully recruited, managed, and conducted 20+ experiments with voluntary participants, followed by thorough documentation and comprehensive follow-up interviews to gather detailed data
- Executed rigorous data cleaning and annotation processes to ensure the accuracy and reliability of the collected information.
- Played a key role in shaping the "Findings" and "Related Work" sections, contributing valuable insights to enhance the overall quality of the paper

Machine Learning and Artificial Intelligence Startup Simulator | Research Assistant | Champaign, IL

Aug. 2023-Dec. 2023

- Simulated the role of a startup company with an AI product focused on enhancing the robustness of machine learning models in visual classification
- Conducted 20+ interviews with UIUC professors and researchers to understand user needs and analyzed results after each interview session to gather insights
- Constructed a website demo, providing an introduction, and summarizing the results of market and user studies of our AI product

The Social Computing Systems Group at the iSchool of UIUC | Research Assistant | Champaign, IL

Aug. 2023-Sep. 2023

- Acknowledged in the paper "Using Self-Clone for Speech Training" submitted to a computer science journal
- Played a crucial role in supporting data cleaning and annotation for a groundbreaking online experiment study focusing on deep fake technologies

SKILLS

Language Skills: Mandarin (Native), English (Fluent)

Programming Skills: Amazon Web Service, Google Cloud Platform, MongoDB, MySQL, Java, C++, Python, R, Unreal Engine 4 and 5, Swift, VisionOS development, Solid understanding of game mechanics and design principles

AI Tools: Familiar with AI and can proficiently use multiple types of AI, such as ChatGPT and Stable Diffusion