

Nuoyan Wang

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Education

University of Illinois Urbana-Champaign

Bachelor of Science in Computer Engineering
(Continuing Master of Science in ECE in Fall 2024)

GPA: 4.0/4.0

Aug 2021 - May 2024 (Expected)

Professional Experience

GoClouds

Software Engineering Intern

Beijing, China

June - August 2023

- Created a full-stack implementation of an AI customer service chatbot, incorporating Facebook logins using their API, working in conjunction with company backend stored in the S3 network, later used to earn new facebook app permissions.
- Enhanced the chatbot with a digital human: implemented demos across 6 AI service providers, communicating with managers, before finally deciding and completing the project using Tencent Cloud AI Digital Human API.

Lenovo

Research Intern

(Remote) Beijing, China

June - August 2023

- Analyzed potential cloud network services across Google, Azure, AWS. Conducted extensive market and technical research.
- Used scholarly sources and meta-studies to determine results, while conducting weekly checkpoints with managers for feedback.
- Concluded project with a 30-minute extensive presentation with managers to discuss findings, particularly in the context of: what are the potential uses for AWS for this company, specifically the benefits of outsourcing cloud computing over owning.

Relevant Coursework

Operating Systems

ECE 391

- Linux OS based study of each aspect of an operating system: x86, interrupts, processors, scheduling, sys-calls, filesystem

Applied Parallel Programming

ECE 408

- C/CUDA for parallel programming + implemented a CNN with varying stride, with shared memory, streams & other optimizations

Distributed System

ECE 428

- Networking protocols including MapReduce, p2p systems, distributed file systems, network structures, multicasting

Artificial Intelligence

ECE 448

- Python implementations of concepts artificial intelligence, including neural nets, computer vision, language processing, CNN

Additional Projects

mini-Linux OS

- With a team of 4, created a Linux-based operating system, featuring interrupts, system calls, filesystems, scheduling, and a terminal
- Industry standard C coding practices including unit-testing 35+ test cases and consistent peer-checking via Gitlab merges/code reviews

FPGA Music Synthesizer

- Designed and manufactured our own embedded software music synthesizer running on an FPGA with a system-on-chip, and audio signals on GPIO outputs. Additional implementation of peripherals, programmable tracks, speakers, and keyboard interrupts. Achieved the maximum possible difficulty score, A+ execution, and was recognized at the final project showcase.

Skills

Software: C, C++, Python, Java, JavaScript, HTML, Git, CUDA

Hardware: SystemVerilog, Intel Quartus, FPGA Design, Intel x86, RISC-V, Verdi

Technologies: Data Structures, Algorithms, MapReduce, REST API Protocol, P2P Systems, Image Processing, PyTorch

Honors & Awards

- Bradley A. Simmons Memorial Scholarship Award** Aug 2023
- Dean's List Recognition** Aug 2021 - Present