Yuetian (Keith) Wang

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Education

Brown University, Providence, RI — Aug 2024 - Present
Master of Science, Computer Science
Cumulative GPA: 4.0

New York University Shanghai, Shanghai, China — Aug 2020 - May 2024
Bachelor of Science, Computer Science, Major GPA: 3.9
Bachelor of Science, Data Science, Major GPA: 3.9
Cumulative GPA: 3.7
Honor: Dean's List for Academic Year 2022 & 2023

Technical Skills

Coding Languages: Python, C++, C, Go, HTML, CSS, JavaScript, SQL, R, Next.js, Haskell, Ocaml, React, x86-64 Assembly
Development Tools: Git, Linux, CI/CD, PyTorch, Stablebaseline3, OpenAIAPI, Virtual Machine, LaTeX
Knowledge Skills: Operating Systems, Distributed Systems, Compilers, Distributed Databases, Machine Learning, Computer Sys Security, Synchronous and Asynchronous Execution

Experience

Software Dev Engineer Intern: ***Amazon Web Services*****,** Seattle, WA — May 2025 - Present

- Leading the design, implementation, and configuration of new features on a large-scale distributed database system for AWS Aurora using C++.
- Integrating Flatbuffer message types with existing Protobuf message types to optimize system and network communication efficiency.
- Conducting correctness verification and defining success metrics to ensure system reliability and performance.

Gen AI Engineering Intern: ***Particle Future*****,** Shanghai, CN — Apr 2024 - July 2024

- Developed, coded, and tested the virtual world environment embedded with generative AI agents to imitate residents and pets.
- Edited 34 prompts for every type of agent supported by ChatGPT and Llama.
- Upgraded a closed-source application of news collection and summarization supported by ChatGPT to adapt to different language inputs and improved prompts.

Projects

Weenix OS (C) — Spring 2025

- Based on Unix, a full operating system kernel was built as a semester-long project.
- Implement Processes, Drivers, Virtual File System, System V File System, and Virtual Memory.

LISP Compiler (Ocaml, x86-64 Assembly, C) — Fall 2024

- Programmed a Lisp-typed compiler and interpreter structured with an abstract syntax tree and basic functions such as arithmetic and variable definitions.
- Supported error handling and stack and heap memory allocation.
- Optimized constant propagation and common subexpression elimination on the AST level to improve the compiler's efficiency.

Database Management System (Go) — Fall 2024

- A disk-oriented, multi-indexed, fully-concurrent, and fully-crash-tolerant database system programmed with Golang.
- Implemented File and Buffer Management, hashing, B+ trees, Join, Concurrency, and Recovery.

Graph Neural Networks for Multi-Modal Sequential Recommendation (Python) — Fall 2023

- Built a model that recommends items for users based on their sequential history multi-modal data.
- Leveraged graph neural networks to learn global relationships among distinct items and their modalities.
- The model presented a better and more stable capability than the baseline model, with a 0.2% improvement measured by Recall and NDCG metrics in the Amazon and Movielens datasets.

Air Tickets Reservation System (Python, Flask, SQL, HTML, CSS) — Spring 2022

- Designed for three types of users: customers, booking agents, and airline staff.
- Created a full-stack system that includes a frontend with more than 30 web pages supporting 28 functions and a backend database.