Hsing-Hao (Jerry) Wang

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Education

Rutgers University – New Brunswick – BS in Computer Science — Sept 2019 – May 2023

University of Maryland – MS in Applied Machine Learning — Sept 2024 – May 2025

Experience

Software QA Engineer Intern — Oct 2020 – Aug 2021

Eslite Corporation — Taipei, Taiwan

- Improved the search domain performance by implementing Amazon Cloud Search to customize text relevance ranking and index data, resulting in 15% increase in search performance
- Developed and executed 400 test cases to optimize checkout flow using Python for automated testing, fixed 2 major crashes regarding shipment information and delivery instructions
- Inspected webpage contents using Chrome DevTools and analyzed discovered issues, providing insights to senior engineers that reduced webpage load time by 200ms

Software Engineer Intern — June 2019 – Aug 2019

Acer Inc. — Taipei, Taiwan

- Worked with a team of 4 engineers to design an Automated Guided Vehicle using Python and Microsoft Azure's AI Cognitive Services (computer vision image classification) for Acer's AI workshop
- Improved the AGV's recognition model with 100 traffic scenarios and field test data using Microsoft Azure AI Cognitive Services, resulting in 60% improvement in vision recognition precision
- Collaborated with the customer service team to provide remote troubleshooting, drafted manuals for Microsoft products, and reduced customer complaints by 20%

Projects

Pascal Subset Compiler

- Built a syntax-directed translation parser and code generator that generated ILOC code for the Pascal Subset using Flex and Bison
- Implemented the register-register model by transferring a scalar variable from virtual registers to physical registers to maximize the opportunities for register allocation

Local Register Allocation

- Designed a bottom-up local register allocation simulator that produced a function-equivalent ILOC operation program using no more than k number of registers
- Implemented the simulator using Chaitin's algorithm and forward list scheduling algorithm in C++ to minimize the use of register spilling and maximize functional unit utilization

Skills

- **Languages**: C++, C, Java, Python, SQL
- **Frameworks**: TensorFlow, PyTorch, Keras, scikit-learn, OpenCV