Amy Wang

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
BS in Computer Science
Expected May 2019 | Urbana, IL
College of Engineering
GPA: 3.3 / 4.0

COURSEWORK

HPC AND SYSTEMS
Computer Systems Organization
Operating Systems Design
Parallel Programming
Programming Languages and Compilers

THEORY AND ANALYSIS
Algorithms and Models of Computation
Graph Theory
Parallel Algorithms
Numerical Analysis

IN PROGRESS
Combinatorics
Distributed Systems

SKILLS

PROGRAMMING
C • C++ • Fortran • Go • Hadoop
Haskell • Java • Python • Verilog
Cilk • MPI • OpenMP

RECOGNITIONS

Dean's List (Fall 2016)

LINKS

Github:// usyma
LinkedIn:// aswang3

EXPERIENCE

CU AEROSPACE | Software Engineer
Aug. 2018 - Current | Champaign, IL

- Optimized existing sequential nonlinear programming solver using various numerical methods.
- Developed commercial parallel nonlinear programming solvers for both distributed and shared memory systems.

CRAY INC. | Research and Development Software Intern
May 2018 – Aug. 2018 | Bloomington, MN

- Optimized Cray's distributed memory leak checker for better scalability and performance with large parallel applications.
- Identified and resolved driver and memory issues associated with large OpenSHMEM applications for July pre-release.
- Resolved long-standing race conditions and gained familiarity and proficiency working with highly parallel networking problems.

NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS | Research Assistant
June 2017 – May 2018 | Urbana, IL

- Evaluated application suitability for migratory thread memory processing architecture.
- Ported kernel computations from Python and C++ into C and Cilk for performance and scalability testing on new architecture from Emu Technology.
- Analyzed performance costs resulting from thread communication and migrations, gaining experience with various different parallel programming models.

CS 433: COMPUTER SYSTEMS ORGANIZATION | Grader
Jan. 2018 – Current | Urbana, IL

- Delivered guest lecture on cache optimizations.
- Developed and graded homework and exam problems.

PROJECTS

SANDWICH | Real-Time Text Editor
Real-time text editors that allows users to modify, create, and save files concurrently over a TCP connection.

INVOLVEMENT

WOMEN IN COMPUTER SCIENCE | Social Committee
Aug. 2017 - Present | Urbana, IL
Developed organization and outreach skills planning social events intended to connect women interested in computer science, as well as the Women in Computer Science's spring awards banquet.

STUDENT OPPORTUNITIES FOR AFTER-SCHOOL RESOURCES | Tutor
Jan. 2018 - May 2018 | Champaign, IL
Provided after-school one-on-one homework help and literacy support at the International Prep Academy.