Riley Weber

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Education

M.S. in Computer Science, Systems Emphasis   Expected to graduate Jun. 2021
University of North Carolina at Charlotte
- "High Performance Computing" - Crafted accelerated algorithms with CUDA. Used Intel Intrinsics and OpenMP to saturate FLOP units and memory bandwidth of modern multicore processors.
- "Machine Learning" - Implemented common machine learning algorithms, such as Least Squares, Linear Discriminant Analysis, and Q-Learning. Designed architecture of Neural Networks.

B.S. in Computer Science, Systems Emphasis, minor in mathematics   Graduated Dec. 2020
University of North Carolina at Charlotte
- "Parallel Computing" - Modelled performance and parallelized algorithms using OpenMP and OpenMPI.

Summary of Skills and Experience

- 5 years experience building native applications using C++ for university courses
- 1 year professional experience with OpenMP, Intel Intrinsics, and performance monitoring software (LIKWID)
- Fluent in Mandarin Chinese and French

Employment History

University of North Carolina at Charlotte   Jan 2020 - Present
Research Assistant - High Performance Computing Laboratory   *Charlotte, NC*
- Manage an individual project to create a custom profiling software using hardware counters (model-specific registers) which analyzes architecture performance on sparse graph problems
- Use Intel Intrinsics, OpenMP, and likwid-perfctr to benchmark desktop systems and compute clusters

Sealed Air   May 2019 - Aug 2019
IT Intern - Innovation & Development   *Charlotte, NC*
- Participated in an agile team tasked with improving an Industrial-IoT application used by factories in three countries
- Developed and automated the creation of data visualizations for presentations to company executives
- Used R, Python, RabbitMQ, ThingWorx, and Java

BYU - Center for Teaching and Learning (CTL)   Jan 2017 - Dec 2017
Computer Support Representative   *Provo, UT*
- Managed conversion of paper processes to web applications affecting two departments and ~110 employees
- Maintained 50 servers which provided access to over 200 websites for many departments across campus
- Sourced and performed troubleshooting on hardware for animators, graphic designers, video editors, programmers, and other CTL employees

Morinda   Aug 2016 - Jan 2017
Commissions Agent   *American Fork, UT*
- Created and maintained records of payments made in four countries using Excel, Windows batch, and Python

RainSweet, Human Resources department   Jun 2013 - Aug 2013
Time Keeper   *Salem, OR*
- Expanded company ethernet network
- Led a project to create a company video that summarized 300+ hours of footage